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GEORGE FARMILOE & SONS,

WEST SMITHFIELD,

LONDON.

GENERAL CATALOGUE.

ENTR. STATIONERS' HALL.

John Kennedy
Clerk of Works.
104. Hartley Road.
Nottingham

GEORGE FARMILOE & SONS'

General Catalogue.

NOTE.—The numbers in this catalogue agree with those of former editions. As, however, some of the goods shown previously are not now included, the numbers of the same are omitted.

GEORGE FARMILOE & SONS,

Lead & Glass Merchants,

MANUFACTURING SANITARY ENGINEERS,

BRASS FOUNDERS, &c.,

34, ST. JOHN STREET, LONDON, E.C.

AND

ISLAND LEAD MILLS, LIMEHOUSE, E.

REVISED EDITION, No. 2, March, 1897.

GEORGE FARMILOE & SONS'

General Catalogue.

SANITARY FITTINGS.
PUMPS.
PIPES AND GUTTERS.
GARDEN FITTINGS.
BRUSHES.
TOOLS.

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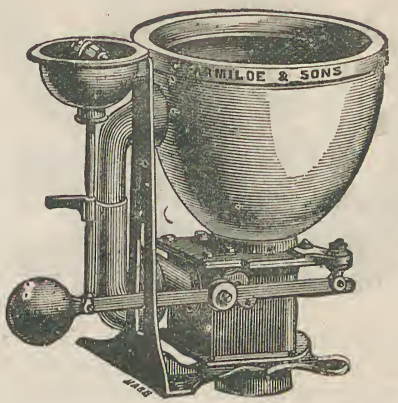
REVISED EDITION, No. 2, ~~March~~ MAY, 1887.

All the Prices quoted are the Manufacturers' Prices at the date of issue, and are subject to alteration without notice.

Special quotations given for any Sanitary Goods not mentioned.

When ordering, please give Number and Size; do not cut the leaves.

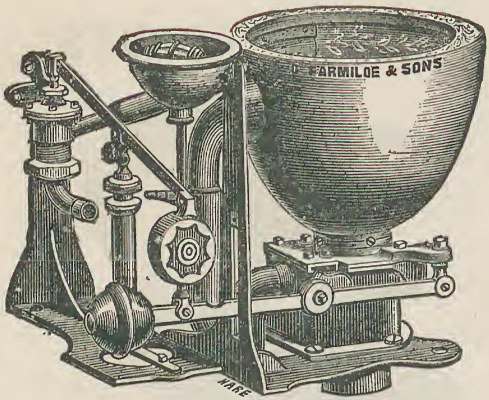
VALVE CLOSETS.



GEORGE FARMILOE & SONS Elastic Valve Closet, with extra large outlet at bottom of basin, and extra large overflow, and with crank to work waste-preventer.

No. 1.—Best quality, with polished pewter box, brass collar, white and gold line basin, plated dish, ivory handle, glass bottom valve, and German silver plated fan, each	£5	2	6
Extra for fancy gilt basin ... ... „		10	0
No. 2.—Best quality, with lead box, brass collar, white or blue basin, brass sunk dish, and glass handle... ... ...each	3	4	6
Extra for fancy basin ... ... „		2	0
„ „ white and gold basin ... . „		8	0
„ „ china bottom valve ... ... „		2	0
„ „ looking-glass bottom valve ... ... „		8	0
„ „ plated dish and handle ... ... „		4	0
„ „ galvanizing iron-work ... ... „		4	0
„ „ round valve apparatus ... ... „		8	0
No. 3.—"Special," with iron box, iron collar, white or blue basin, brass sunk dish, and porcelain handle... ... ...each	2	0	0
Extra for fancy basin ... ... „		2	0
„ „ round valve apparatus ... ... „		4	6
„ „ enamelling box inside ... ... „		5	0

FLUSHING RIM BASINS AT SAME PRICES.



GEORGE FARMILOE & SONS' Elastic Valve Closet, with extra large outlet at bottom of basin, and extra large trapped overflow, 1-in. supply valve, and brass or bellows regulator.

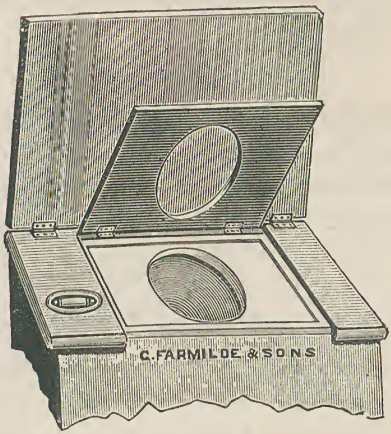
No. 4.—Best quality, with polished pewter box, brass collar, white and gold line basin, plated dish, ivory handle, glass bottom valve, and German silver plated fan, each	£6	5	0
Extra for fancy gilt basin ... ... ,,		10	0
No. 5.—Best quality, with lead box, brass collar, white or blue basin, brass sunk dish, and glass handle... ... ...each	4	7	6
Extra for fancy basin ... ... ,,		2	0
,, ,, white and gold basin ... ... ,,		8	0
,, ,, china bottom valve ... ... ,,		2	0
,, ,, looking-glass bottom valve .. ... ,,		8	0
,, ,, plated dish and handle ... ... ,,		4	0
,, ,, galvanizing iron-work ... ... ,,		6	0
,, ,, pipe and union from supply arm to overflow trap ... ... each		10	0
No. 6.—"Special," with iron box, iron collar, white or blue basin, brass sunk dish, and porcelain handle ... ...each	3	0	0
Extra for fancy basin ... ... ,,		2	0
,, ,, enamelling box inside ... ... ,,		5	0

EXTRAS.

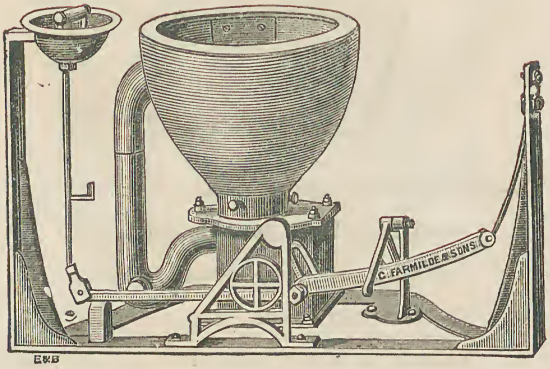
Either of the above fitted with Copper Regulator... ... ... each		3	0
,, ,, ,, ,, ,, $1\frac{1}{4}$-in. Supply Valve ... ... ,,		4	6
,, ,, ,, ,, ,, $1\frac{1}{2}$-in. ,, ,, ... ,,		7	6

FLUSHING RIM BASINS AT SAME PRICES.

No. 7.—G. Farmiloe & Sons' White Earthenware Slop Top, suitable for either valve or wash-out closets, making these available as water closets, urinals, or slop closets ... ... each 10/0



SKETCH SHOWING G. FARMILOE & SONS' SLOP TOP IN POSITION.



GEORGE FARMILOE & SONS' Spring Valve Closet, with elastic seating.

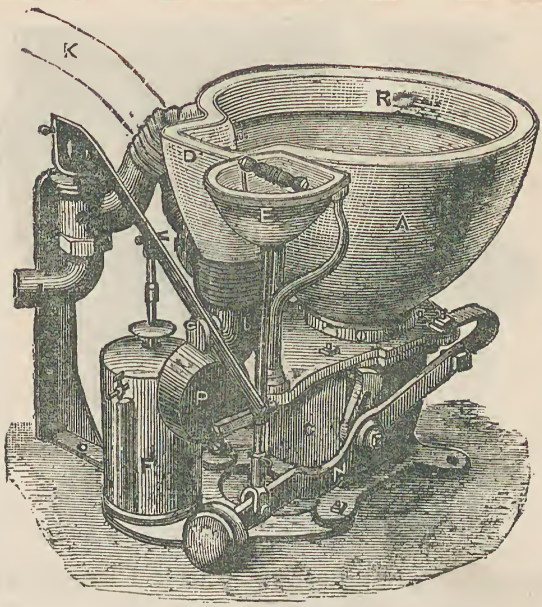
No. 9.—Best quality, with lead box, brass collar, white or blue basin, brass sunk dish, and glass handle, on wood or iron frame ... ... each £4 7 6

Apparatus for ditto, Extra, viz.:—

SET, consisting of Spring Valve, Spring Board, Brass Rod and Sling, 2 Cranks, and Copper Wire ... ... extra 18 6

SET, consisting of Round Valve, Ball Lever, 2 Cranks, and Copper Wire ... ... extra 8 0

These Closets are also made with Ground-in Seatings, but are ***not now recommended.***



No. 13.—Hellyer's Patent OPTIMUS

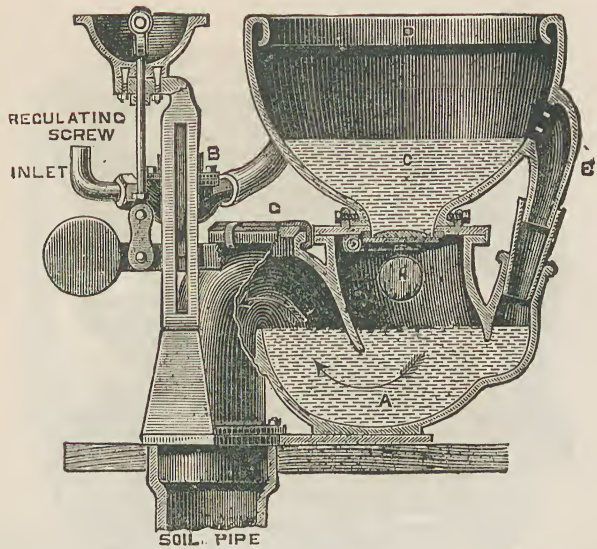
Elastic Valve Closet, with porcelain enamelled cast-iron conductor and vent-arm, white flushing-rim basin and dish to match, and ebony handle), including 1¼-in.* supply-valve and *copper* regulator, complete £4 17 0

Ditto *with overflow in side instead of top of basin* 4 17 0

If with 1½-in. supply-valve, instead of 1¼-in.	... ...	*extra*	4 0
,, 1-in. ,, ,, ,,	... ...	*deduct*	3 0
,, coloured basin		*extra*	5 0
,, coloured basin, picked out in gold		,,	15 0
,, white-ware "slop-top"		,,	10 0

Note.—This closet can be had with ebony knob and brass guide-pull, for working through the stile. No difference in the price.

* The supply of water is of great importance. When the *head* of water is under 6-ft., the supply-valve should not be less than 1½-in.; between 8-ft. and 12-ft., 1¼-in.; and between 12-ft. and 30-ft., 1-in. To avoid a greater head of water than this (about 30-ft.), an intervening cistern should be fixed somewhere. The service-pipe should be the same size as the supply valve, and a *clear way* stop-cock should be fixed in the branch-service to each water-closet.



DOULTON'S "Lambeth" Valve Closet, trapped above floor line, stoneware trap.

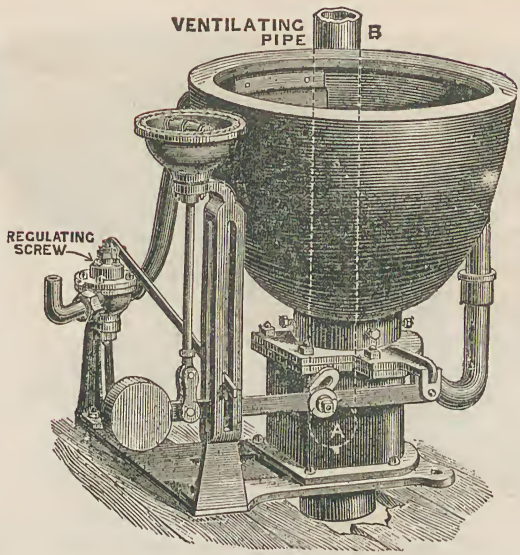
No. 14.—White flushing rim basin, "Doulton ware" sunk dish and handle, and Doulton's patent 1-in. regulating supply valve (No. 6) ... ... each £3 17 6

No. 15.—White flushing rim basin, "Doulton ware" sunk dish and handle, complete, to work with waste-preventer, each 2 17 6

N.B.—The trap can be had to shoot out at back, or to right or left hand.

EXTRAS.

Handsomely Ornamented "Doulton Ware" Sunk Dish and Handle	each	2	6
1¼-in. Regulating Supply Valve to No. 14	„	3	0
Blue Basin	„	3	6
Fancy „	„	5	6
White and Gold Basin...	„	10	0
1-in. Waste Preventing Valve to No. 14	„	15	0
1¼-in. „ „ „ „	„	1 1	0



No. 16.—Doulton's Improved Valve Closet, without trap, white basin, with flushing rim, Doulton's Patent 1-in. Regulating Supply Valve, and Doulton ware sunk dish and handle (No. 8) each £3 10 0

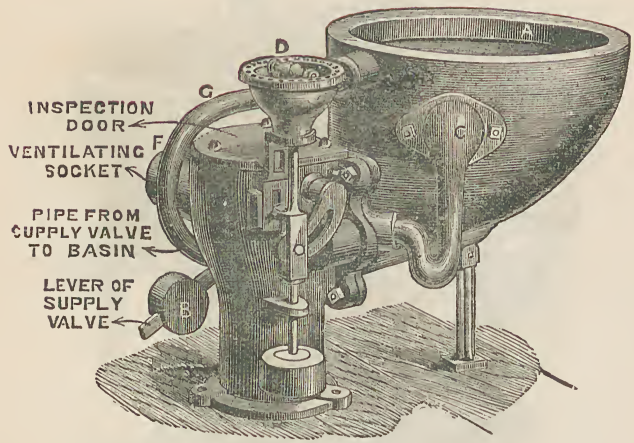
No. 16A.—Special ditto, with brass cover, lead box, &c., for first-class work ... 5 5 0

No. 17.—Doulton's Improved Valve closet, without trap, white basin, and flushing rim, Doulton ware sunk dish and handle, to work with service box or water waste preventer (No. 9) each 2 10 0

EXTRAS.

1¼-in. Regulating Supply Valve ... ... each	3	0
Handsomely ornamented Doulton ware sunk dish and handle ,,	2	6
Blue Basin ... ... ,,	3	6
Fancy Basin ... ... ,,	5	6
White and Gold Basin ... ... ,,	10	0
1-in. Waste Preventing Valve, 15/-; 1¼-in. ... ... ,,	21	0

N.B.—These Closets have a special provision at A for carrying up pipe B to ventilate between discharge valve and trap.



No. 18.—The Lambeth "Trapless" Valve Closet, white flushing rim basin, "Doulton ware" sunk dish and handle, and Doulton's patent 1-in. regulating supply valve (No. 13) each £4 0 0

Ditto, with 1¼-in. supply valve ... „ 4 3 0

No. 19.—The Lambeth "Trapless" Valve Closet, white flushing rim basin, "Doulton ware" sunk dish and handle, to work with water waste preventer (No. 13 A) ... ... each 3 3 0

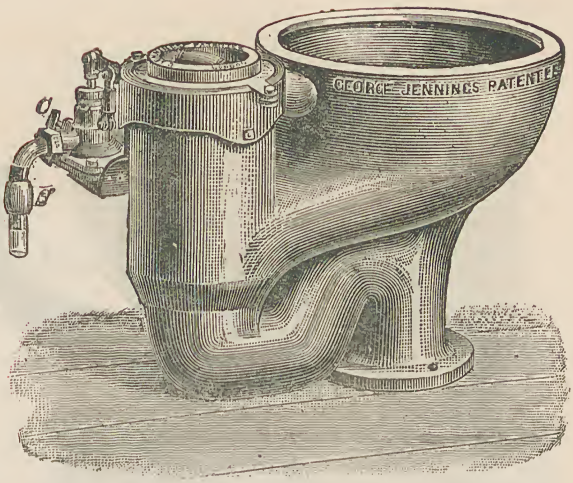
The basin is made with a very sharp inclination to the outlet, and the flushing arm is so placed as to render it impossible for anything to be retained.

The general construction of the Closet renders the usual complication of levers both for the supply and discharge valves unnecessary, as both are worked by the same spindle with direct action at each end, a very small weight being sufficient to render the discharge valve tight.

EXTRAS.

Handsomely Ornamented "Doulton Ware" Dish and Handle ... ... each	2	6
Blue or Marbled Basin... ... ... „	6	6
Fancy „ „ ... ... „	8	6
Gold lined „ „ ... ... „	12	6
Handsome Scroll „ ... ... „	15	0
Waste Preventing Valve under Seat ... ... (Extra to No. 18) „	7	6

N.B.—For pressures under 10-ft. head of water the 1¼-in. valve must be used.



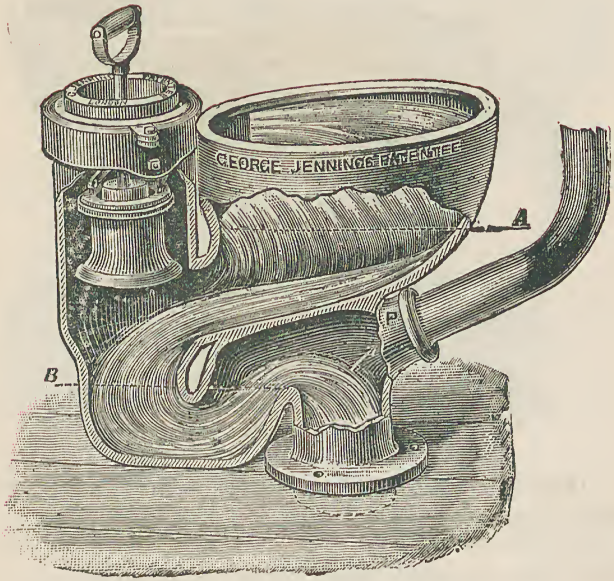
JENNINGS' Patent Valve Closet and Trap, in one piece of earthenware.

No. 20.—In white ware, glazed, fitted with supply valve, patent ball plug overflow, and earthenware sunk dish ... each	£3	10 0
With printed or marble basin ... „	4	10 0
With enamelled blue basin, cast brass sunk dish, and glass handle ... each	5	15 0
With enamelled white or blue basin, with gilt scroll, silver plated sunk dish, amber cut glass or ivory handle, from	6	15 0

EXTRA.

With Jennings' patent water waste preventer		25 0

N.B.—For export and for exposed situations these closets are made with cylinder and trap of galvanized iron, and the basin and valve seat of earthenware, at same prices. In fixing these closets, the soil pipes should be so arranged as to be 2½-ins. to the right of centre of closet space, and 13-ins. from back wall.

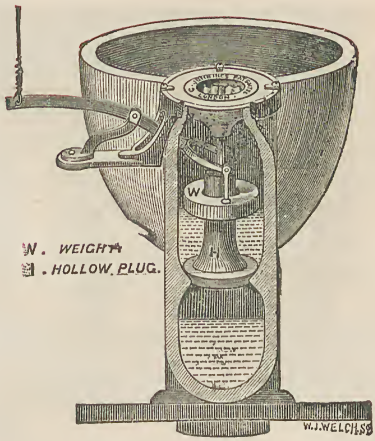


JENNINGS' Patent Valve Closet and Trap, in one piece of earthenware, with socket for ventilating pipe.

No. 21.—In white ware glazed, fitted with supply valve, patent ball plug overflow, and earthen-ware sunk dish each	£4	0	0
With printed or marbled basin ... „	5	0	0
„ enamelled blue basin, cast brass sunk dish, and glass handle, each	6	5	0
„ enamelled white or blue basin, with gilt scroll, silver-plated sunk dish, amber cut glass, or ivory handle ... ... from	7	5	0

EXTRA.

With Jennings' Patent Water Waste Preventer ... ... each	25	0	



No. 22.—JENNINGS' Patent Valve Closet and Trap, in one piece of earthenware, with lever to work waste preventer. In white ware glazed, patent ball plug overflow, and earthenware sunk dish, each £3 2 6

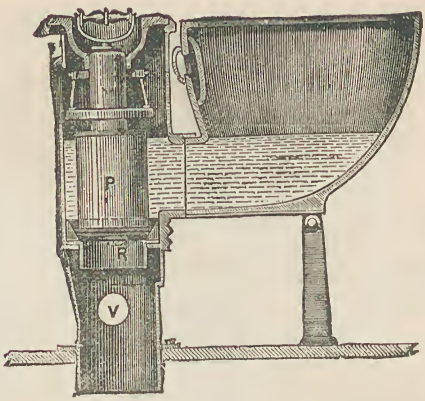
With printed or marbled basin ... „ 4 2 6

With enamelled blue basin, cast brass sunk dish, and glass handle..... each 5 7 6

With enamelled white or blue basin, with gilt scroll, silver plated sunk dish, amber cut glass or ivory handle, from 6 7 6

EXTRA.

With Ventilating Socket as No. 21 ... ... each 10 0



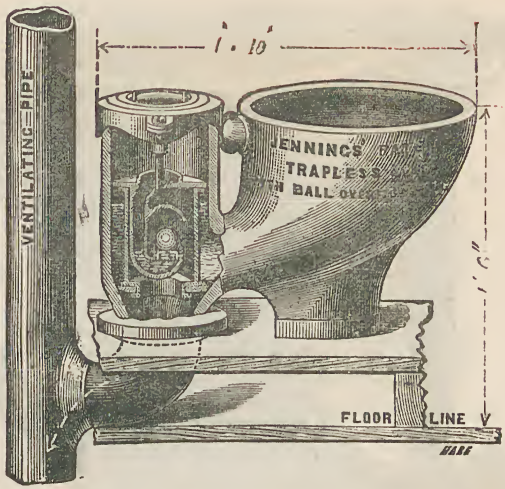
No. 23.—JENNINGS' Patent Trapless Valve Closet. With white earthenware basin and sunk dish, galvanized iron cylinder, and with patent ball overflow ... ... each £3 0 0

With printed basin ... ... „ 4 0 0

With enamelled blue basin, cast brass sunk dish, and glass handle ... each 5 5 0

With enamelled basin, with gilt scroll, silver plated cast brass dish, and amber cut glass or ivory handle, from 6 5 0

These closets are made in one piece of earthenware, and supplied at 10/0 extra. In fixing these closets, the soil pipe should be so arranged as to be 12-ins. to the left of centre of closet space, and 13-ins. from back wall, in all cases well ventilated.



No. 24.—JENNINGS' Patent Trapless Valve Closet (Fig. 4). In one piece of earthenware, for fixing on soil-pipe above the floor-line. With white earthenware basin and sunk dish, galvanized iron cylinder, and with patent ball overflow ... ... each £3 10 0

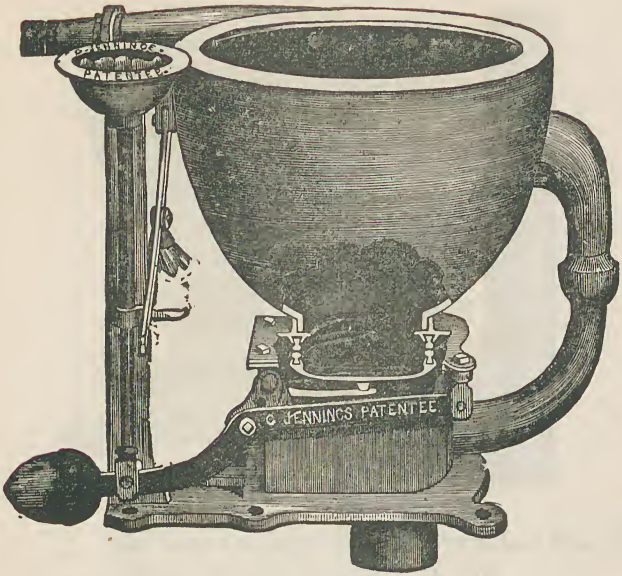
With printed basin ... ... „ 4 10 0

With enamelled blue basin, cast brass sunk dish, and glass handle ... each 5 15 0

With enamelled basin, with gilt scroll, silver-plated cast brass sunk dish, and amber cut glass or ivory handle, from 6 15 0

EXTRA.

No. 23 or 24.—Fitted with Jennings' Patent Water Waste Preventer ... ... each 25 0



No. 25.—JENNINGS' Patent Double-seated Valve Closet. These closets are now fitted with Jennings' patent anti-percussion regulating valve, the air regulator heretofore used being dispensed with. With white basin, flat plate handle, and supply valve ... ... each £3 10 0

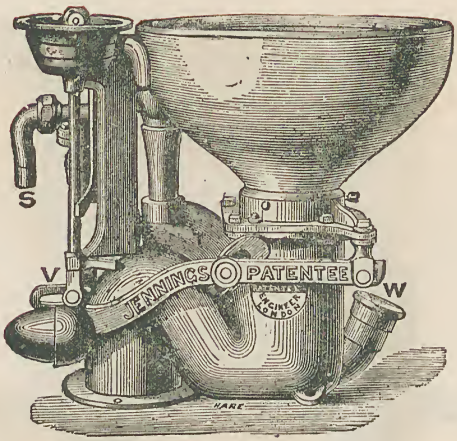
With white basin, brass sunk dish handle, and supply valve ... ... each 3 17 6

With blue basin, brass sunk dish handle, and supply valve ... each 4 4 0

With blue or white and gilt basin, cast brass sunk dish, cut glass handle, and supply valve ... ... each 5 0 0

EXTRA.

Fitted with Jennings' Patent Water Waste Preventer ... ... each 25 0



No. 26.—JENNINGS' Patent Improved Bramah Valve Closet and Trap. The over-flow under the fan ensures the washing out and re-charging of the over-flow trap, each time the service valve is opened. The basin is of earthenware, and the trap of galvanized cast iron.

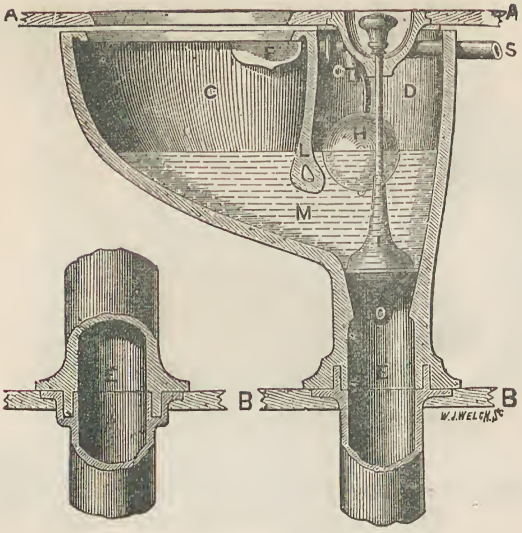
With white basin and opal handle, each	£3	10	0
With blue or marble basin and ebony handle ... ... each	4	4	0
With blue or white and gilt basin, amber cut glass, or ivory handle, each	5	5	0

EXTRA.

With Jennings' Patent Waste Preventer ... ... each	25	0	

In fixing this Closet and Trap, the centre of the Soil-pipe should be 7½-ins. to the left of centre of closet space, and 13-ins. from the back wall.

Jennings' Patent TRAPLESS Bramah Valve Closet at same prices.



PEARSONS' Patent "Twin Basin" Trapless Valve Closet. In one piece of Earthenware.

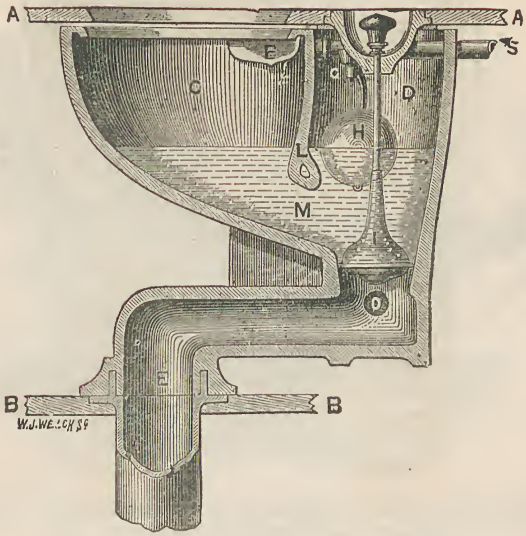
Fig 1. *Form C.*

No. 27.—White, with fittings ... ... each £4 4 0

EXTRAS.

Blue Printed Basin	each	9	0
Handsome Gold Printed Basin	,,	35	0
Pearson's Patent Waste Preventer	,,	21	0
Brian Jones's Patent Joint (for lead soil pipe only), a sure protection against the escape of sewer gas, as it cannot perish, get broken, or be eaten through by rats	,,	6	0

These Closets are made with an outlet at side, and brass union attached for overflow.



PEARSON'S Patent "Twin Basin" Trapless Valve Closet. In one piece of Earthenware.

Fig. 3. Form B.

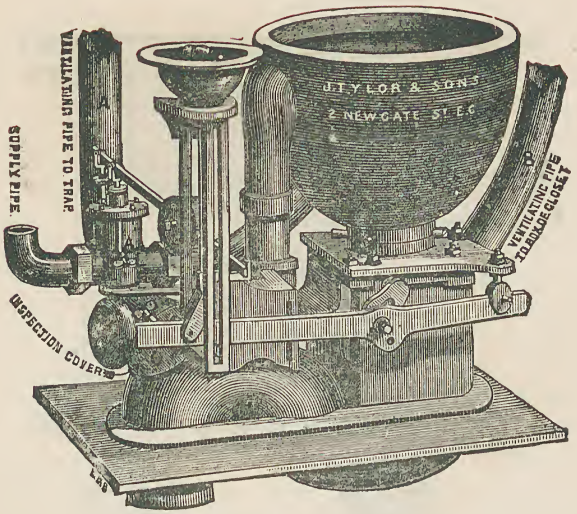
This Closet is the same as the one preceding, excepting that it is designed for replacing old Closets on soil pipes which are brought up to centre of Closet space.

It will not, however, work properly if fixed over a trap.

No. 28.—White, with fittings ... ... each £5 5 0

Extras, as to preceding Closet.

These Closets are made with an outlet at side, and brass union attached for overflow.



No. 31.—J. Tylor & Sons' Patent Regulator Valve Closet, with after flush and full size basin, trapped above floor level, and with patent parallel action, adjustable pull, and frictionless guide (Fig. 9/2). With regulating valve, trapped overflow charged each action, galvanized iron trap, with cleaning cap and ventilating pipe sockets. White basin, brass sunk dish, porcelain handle ... each £5 2 0

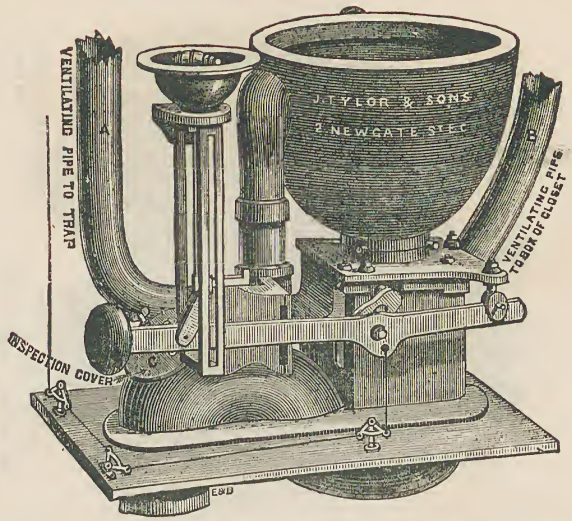
Handsome pattern basin ditto ... ,, 5 5 0

White and gold lined basin ditto ... ,, 5 12 0

Handsome flowers and gilt basin... ,, 5 17 0

EXTRAS.

Silvered Glass outlet valve plate ... ... each	6	0
Nickel-plated Brass ,, ,, ... ,,	2	0
Earthenware ,, ,, white ... ... ,,	2	0
,, ,, ,, fancy ... ... ,,	2	6
,, ,, ,, flowers and gilt ... ... ,,	4	6
Nickel-plated Dish, &c. ... ... ,,	6	0
1¼-in. Supply Valve ... ... ,,	4	0
1½-in. ,, ,, ... ,,	14	0
J. Tylor & Sons' "Waste Not" Regulating Valve ... ... ,,	8	0
Ditto, with extra large way ... ... ,,	14	0

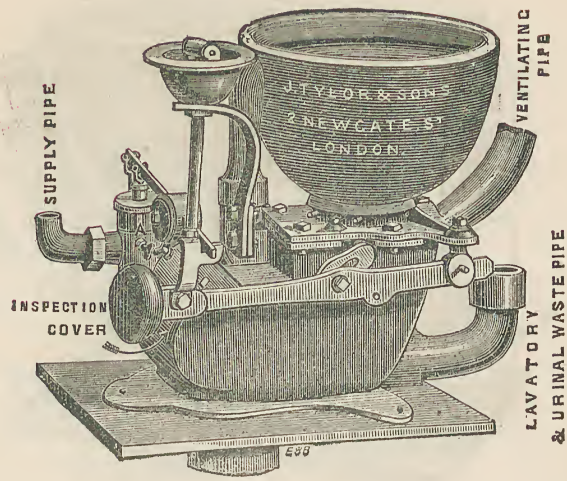


No. 32.—J. Tylor & Sons' Patent Valve Closet, with full size basin, trapped above floor level, and patent parallel action, adjustable pull, and frictionless guide. To work waste-preventing or other apparatus by cranks and wire. Perfectly flushed basin without fan, large trapped overflow charged each action, and galvanized iron trap, with inspection cover C, with 2-in. ventilating pipe socket A in highest part of trap, 2-in. ventilating pipe socket B to box of closet, 1¼-in. dip to trap, and fitted with wide flange for screwing to floor.

White basin, brass sunk dish, porcelain handle, crank and wire ...	...each	£4	5	6
Handsome pattern basin	ditto ,,	4	8	6
White and gold lined basin	ditto ,,	4	15	6
Handsome flower and gilt basin	ditto ,,	5	0	6

EXTRAS.

Silvered glass outlet valve plate	each	6	0	
Nickel-plated brass ,, ,, ...	,,	2	0	
Earthenware ,, ,, white	,,	2	0	
,, ,, ,, fancy	,,	2	6	
,, ,, ,, flowers and gilt	,,	4	6	
Nickel-plated Dish, &c.	,,	6	0	



No. 33.—J. Tylor & Sons' Patent New Pattern Valve Closet (Fig. $\frac{9}{5}$), with regulating valve, iron trap above floor level, with cleaning cap and ventilating pipe socket, earthenware outlet valve plate, large trapped overflow charged each action, trapped inlet for lavatory and urinal. White basin, brass sunk dish, and painted iron trap ... ... each £3 11 6

Ditto, and galvanized iron trap „ 3 16 0

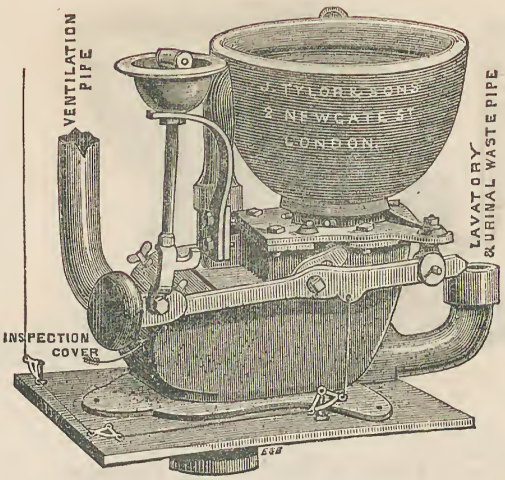
Handsome pattern basin and painted iron trap ... ... each 3 14 0

Ditto, with galvanized iron trap ... „ 3 18 6

EXTRAS.

1¼-in. Supply Valve	each	4	0
1½-in. „	„	14	0
J. Tylor & Sons' "Waste Not" Regulating Valve	„	8	0
Ditto, with extra large way...	„	14	0

The Trap of this Closet is made to shoot out if required.



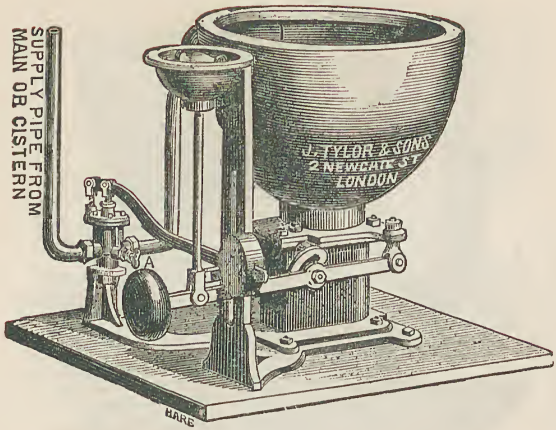
No. 34.—J. Tylor & Sons' Patent New Pattern Valve Closet (Fig. 6), with iron trap above floor level, with cleaning cover and ventilating pipe socket, earthenware outlet valve plate, large trapped over-flow charged each action, trapped inlet for lavatory and urinal. To work waste preventing cistern, or other apparatus, by crank and wires. White basin, brass sunk dish, painted iron trap, and cranks and wire, each £2 10 0

Ditto, with galvanized iron trap... „ 2 14 6

Handsome pattern basin and painted trap, and cranks and wire ... each 2 12 0

Ditto, with galvanized iron trap ... „ 2 16 6

The Trap of this Closet is made to shoot out if required.



No. 36.—J. Tylor & Sons' Patent Regulator Valve Closet (Fig. 1). The quantity of after-flush is regulated by turning the small tap A. White basin, flat plate and handle ... ... each £4 4 0

White basin, sunk dish and handle, „ 4 8 6

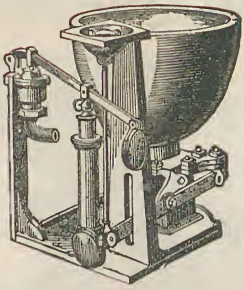
Handsome pattern basin, sunk dish and handle ... ... each 4 13 6

White and gold basin, sunk dish and handle ... ... each 5 0 6

Flower and gilt basin, sunk dish and handle ... ... each 5 5 6

EXTRAS.

1¼-in. Supply Valve	each	4	0
1½-in. „ „	„	14	0
Enamelled Iron Box	„	5	0
Silvered Glass outlet valve plate	„	6	0
J. Tylor & Sons' "Waste Not" Regulator	„	8	0
Ditto, with extra large way...	„	14	0



No. 37.—Underhay's Elastic Valve Closet. With Underhay's Patent Brass Regulator.

No. 1.	Best quality, ¾-in. valve, flat plate, white basin ... ... each	£4	8	6
,, 2.	Ditto, with sunk dish and glass handle, ,,	4	13	0
,, 3.	Ditto, with fancy basin, sunk dish, and glass handle ... ... each	4	18	0
,, 4.	Ditto, with plated dish, ivory handle, glass bottom valve, and white basin ... each	5	10	0
,, 5.	Ditto, with fancy basin ... ... ,,	5	14	6
,, 6.	Ditto, with white and gold basin ... ,,	5	19	6

If with German silver plated fan, 4/6 extra.

Any of the above with silvered glass bottom valve, 8/0 extra.

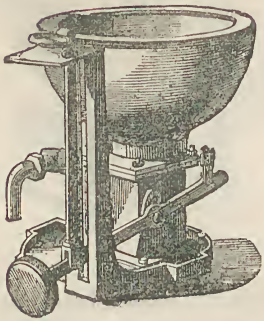
No. 7.	Second quality, ¾-in. valve, flat plate, white basin ... ... each	£3	13	6
,, 8.	Ditto, with fancy basin ... ... ,,	3	18	6
,, 9.	Ditto, with white basin, sunk dish, and glass handle ... ... each	3	18	6
,, 10.	Ditto, with fancy basin ... ... ,,	4	3	0

1-in. valve, 3/0 extra; 1¼-in. valve, 9/0 extra.

Underhay's Waste Preventer, see page 69, fitted to either of the above, to work under the seat: ¾-in. 20/0 extra; 1-in. 23/0 extra.

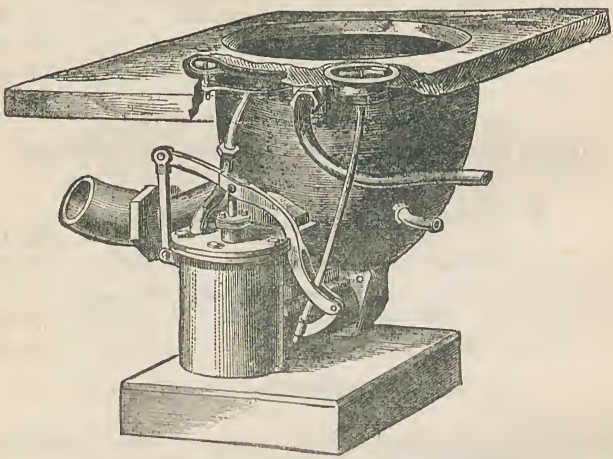
These Closets are all of Underhay's own manufacture, and have his name on the Dishes.

SHIP CLOSETS.



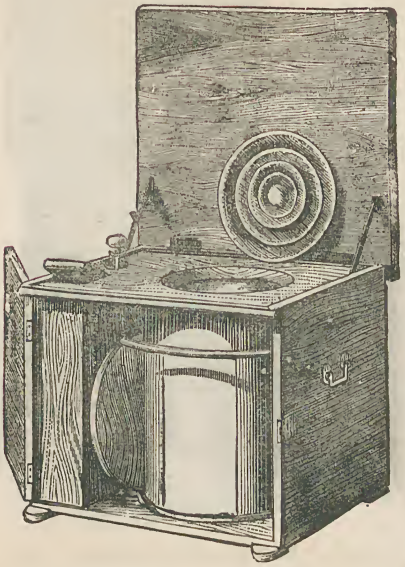
No. 38.—Ship Closet, on wood or iron frame, with ground-in valve and round-way cock with unions, the basin covered with copper ... ... each £3 3 0

Ditto, with elastic valve ... ... „ 2 15 0



No. 39.—Downton's Ship Closet, for fixing below water line ... ... each £11 11 0

PORTABLE CLOSETS.



No. 40.—Full size Portable Water Closets. In French-polished mahogany case, with door in front ... ... each £4 15 0

Ditto, in French-polished birch case „ 4 10 0

Ditto, in French-polished mahogany case, without door ... ... each 4 12 0

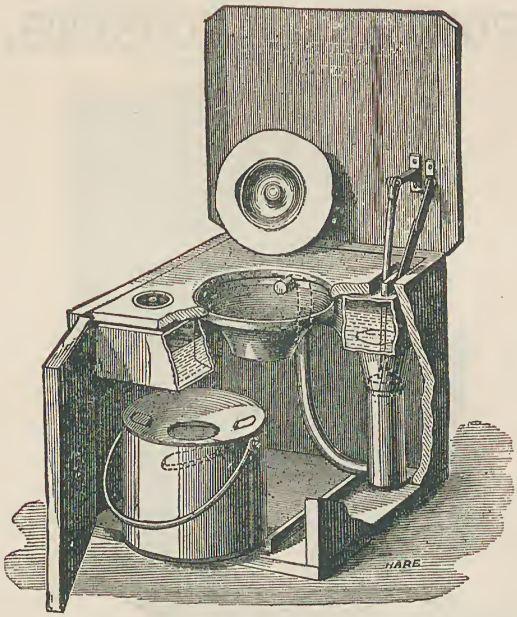
Ditto, in French-polished mahogany case, small... ... ... each 3 15 0

Ditto, in painted case, without door „ 4 0 0

Ditto, in painted case, small ... „ 3 0 0

EXTRAS.

Arms to Portable Closets ... ... each	10	0
Blue Basins ... ... „	1	0
Double-action Pumps ... ... „	12	0
Copper Pail and Cistern ... ... „	22	0



No. 41.—Self-acting Portable Water Closets. In French-polished mahogany case, with door in front ... ... each £4 17 6

In French-polished birch case ... „ 4 15 0

In painted case, without door ... „ 3 12 6

This Closet acts by the *closing of the cover;* a lever from the cover being attached to the pump, which thus discharges a supply of water to flush the pan when the cover is shut down. It will be found a most useful form of Portable Closet, or Night Commode, and is extensively used on the Continent.

No. 42.—Small-size Night Commode. With enamelled iron pan and cover, with water-tight joint; adapted for hospitals, schools, vessels, and general use, where a cheap and efficient closet is required. In mahogany case ... ... each £1 18 0

Ditto, in birch case ... ... „ 1 15 6

PAN CLOSETS.

		£	s	d
No. 43.—	Sunk dish, white or blue basin, and round valve apparatus complete, each	£0	18	0
No. 44.—	Ditto, with two cranks and wire only, each	0	15	0
No. 45.—	Best quality, sunk dish, white or blue basin, hammered copper pan, and extra strong fittings... ... ... each	1	9	0
No. 46.—	Ditto, with two cranks and wire only, each	1	4	0

REGULATOR PAN CLOSETS.

		£	s	d
No. 47.—	Sunk dish, white or blue basin, zinc bellows or brass regulator, ¾-in. supply valve ... ... each	£1	4	0
No. 48.—	Best quality ditto, with hammered copper pan, and large sunk dish, each	1	15	0

EXTRAS to 47 and 48.

Copper Regulator	each	3	0
1-in. Supply Valves	„	3	0

UNDERHAY'S REGULATOR PAN CLOSETS.

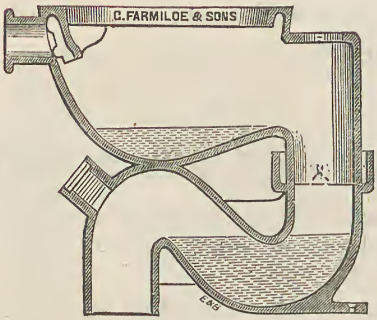
		£	s	d
No. 49.—	Best quality, sunk dish, ¾-in. valve, white basin ... ... each	£2	16	6
No. 50.—	Second quality, sunk dish, ¾-in. valve, white basin ... ... each	2	13	0
No. 51.—	Third quality, sunk dish, ¾-in. valve, white basin ... ... each	2	8	6

EXTRAS.

Blue Basin	each	3	0
1-in. Supply Valves	„	3	0
1¼-in. „ „	„	9	0

Nos. 49, 50, and 51 Closets are of Underhay's manufacture, and have his name on the dishes.

"WASH OUT" AND COTTAGE CLOSETS.



No. 52.—The "Avalanche" Registered Closet and Trap.

The flushing principle ensures the surface of the basin being thoroughly cleansed each time the handle is pulled.

This Closet is found equally efficient, whether supply is from the main or from a waste preventing cistern.

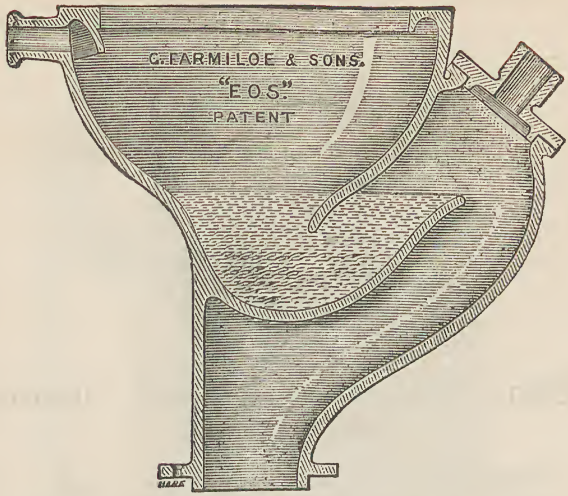
A cover is fitted at top of side chamber, which can be removed in case of stoppage.

White basin, with cane trap, S or P ... each	£0	16 6
Printed ,, ,, ,, ... ,,	0	18 0

If without trap, 3/- *each less.*

EXTRAS.

With Ventilating Socket ... ... each	0 6
Fitted with Patent Cast Lead Eclipse Trap ... ... ,,	10 0



No. 53.—George Farmiloe & Sons' Round "E O S" Closet, in one piece of earthenware. With inlet at side. Can be fixed either right or left hand.

White ... each 22/6 Printed ... each 25/0

No. 53a.—George Farmiloe & Sons' New Pattern Oval "E O S" Closet in one piece of earthenware, with inlet at back.

White ... each 25/0 Printed ... each 27/6

Note.—*In fixing either of the above closets it is most important that the supply pipe should be large enough. If under 4-ft. fall 2-in. pipe should be used; if between 4-ft. and 6-ft., 1½-in.; if above 6-ft. 1¼-in. It is also important that there should be no sharp bends in the pipe.*

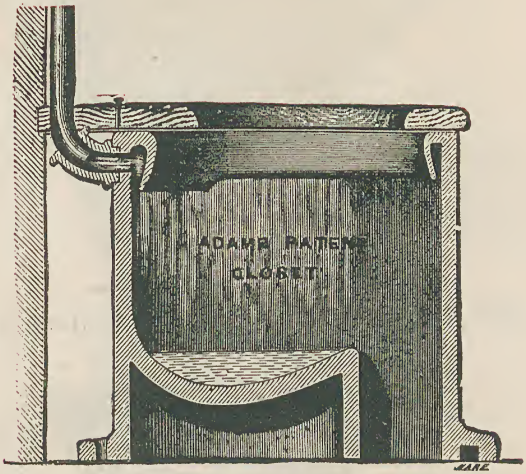
No. 53b.—GEORGE FARMILOE & SONS' "BEDFORD" Wash-out Closet.

White Basin and Cane Trap ... ...each		10/6
Printed „ „ „ „ ... ... „		12/0
With ventilating arm to trap...	each	6d. extra.

Without trap, each 2/0 less.

No. 53c.—GEORGE FARMILOE & SONS' "IVY" Wash-out Closet, in one piece of earthenware, suitable for use without enclosure.

White or Ivory ... ...each	30/0
Ivy tinted in natural colors ... ... „	42/0



No. 53d.—Patent Factory Closet, in brown stoneware.

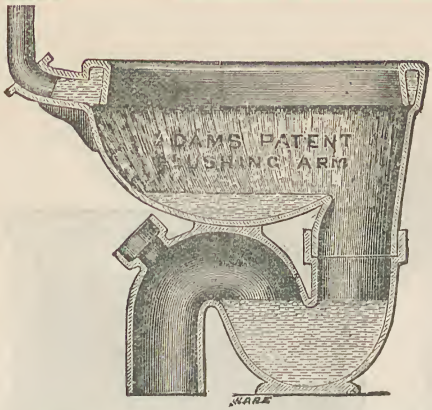
This Closet is intended for cottage property, factories, servants' use, &c., where a substantial closet is required. It can be flushed either automatically by a flush tank, as shown on pages 92A and 92B, or by a waste-preventing cistern, see page 70, actuated by the seat or by a pull-chain.

The Closet is made in brown salt-glazed ware, and fitted with Patent Flushing Arm.

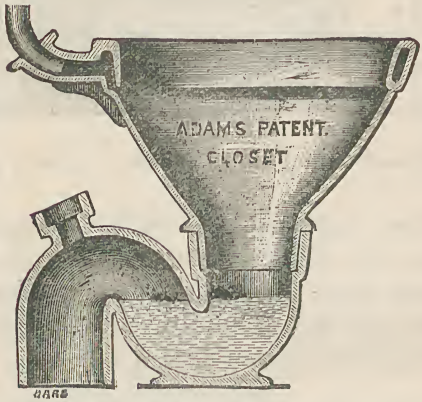
Each 17/6

EXTRAS.

Pine seat bolted on ... ... each	5/6
Pine seat and attachment for actuating waste-preventing cistern in place of pull-chain, complete ... ... each	15/6



No. 53e.—Wash-out Closet with Patent Flushing Arm.



No. 53f.—Improved Hopper Closet, with Patent Flushing Arm.

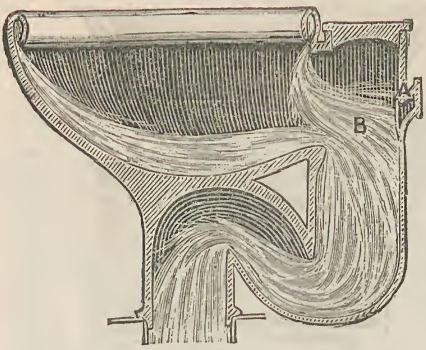
These Closets are of best manufacture, and are fitted with the patent flushing arm and pipe joint. This joint enables the connection between flush pipe and pan to be made quickly and well. The pan may be placed at any required distance from wall. A water-locked flush pipe is an impossibility where the joint is used, and a powerful discharge is obtained.

PRICES with S or P Trap, as shown.

No. 53E.—Wash-out Closet.
White .. ... each 20/0
Printed ... ,, 27/6

With Ventilating Socket to trap, 1/6 extra.

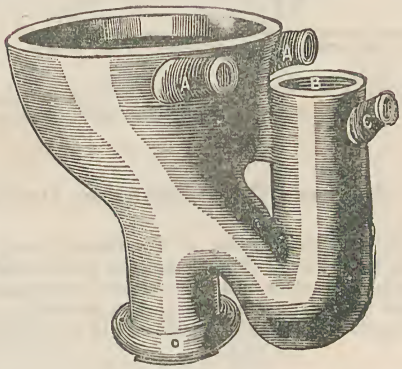
No. 53F.—Improved Hopper Closet.
Cane and White, each 10/6
Best White ... ,, 15/0
Printed ... ... ,, 18/6



Over flow and Fresh Air Inlet.

Forcing or Clearing Shaft.

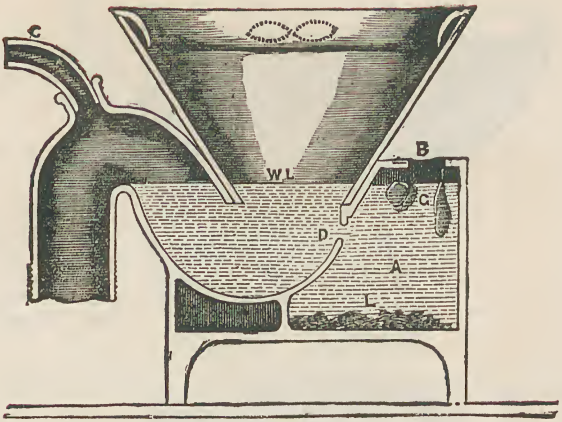
If Soil Pipe or Drain is choked, it can be cleared by this Shaft as a Force Pump with the Plumber's ordinary "Plunger."



A A Inlet of flushing Arms.
B Forcing and Clearing Shaft.
C Overflow.

No. 54.—Bostel's Patent "Excelsior" Water Closet.

Brighton "Excelsior" W.C., white... ... ... each	£1	17	6
" " " blue, ... "	2	7	6
" " " mauve and gold... "	2	12	6
Bostel's artisan closet ... ... "		7	6
" improved automatic flushing cisterns, in deal ... ... each	1	15	0
" improved automatic flushing cisterns, recommended for artisan closet only, in iron, each	1	1	0
" brass sunk dish, pull-up handle and regulating iron standard ... ... each		11	6
" brass chain, pull-down handle ... ... ,		7	9



A Chamber for Camphor and Lime. B Plug for Charging. C Ventilating Pipe. D Connection between Trap and Chamber. G Camphor. L Lime.

No. 55.—Brazier's Patent Self-Acting Deoderizing Closet.

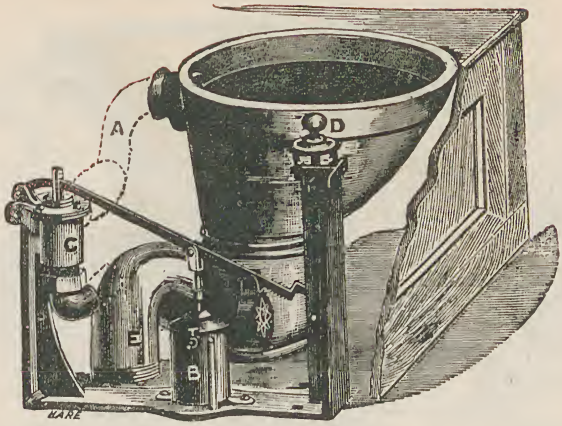
By the flush the whole surface of the Basin is well scoured, and the Trap left with a water lock of 1-in., containing about a gallon and a half of water, which quickly becomes clear lime water impregnated with camphor—the sweetest and best disinfectors; and when passed from Closets to Drains refreshens and purifies them at the small cost of two or three pence once in three months.

Cane and white ... ... each	£1	10	0
White pan and cane trap... ... ... „	1	12	6
„ „ trap... ... ... „	1	16	0
Blue or marble pan and white trap ... ... „	1	18	6
Mauve pan and white trap ... ... „	2	2	0

No. 56.—Brazier's Patent Direct-Acting Water Closet.

As above, but without deoderizing chamber.

Cane and white ... ... each	£0	12	0
White pan and cane trap ... ... „	0	15	0
Printed „ „ ... ... „	0	18	0



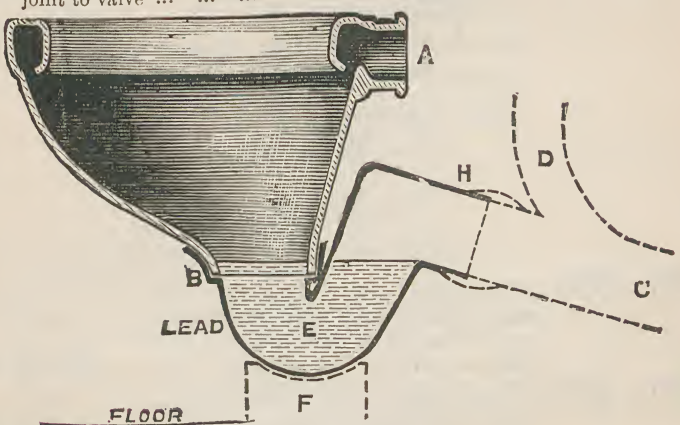
No. 57.—HELLYER'S Patent "Artisan" Closet-basin in white-ware, with yellow-ware trap, white inside, P or S £0 12 6

Ditto ditto with 1¼-in. supply-valve, copper regulator, on cast-iron frame, with ebony knob and brass guide-pull, for working through stile 2 7 6

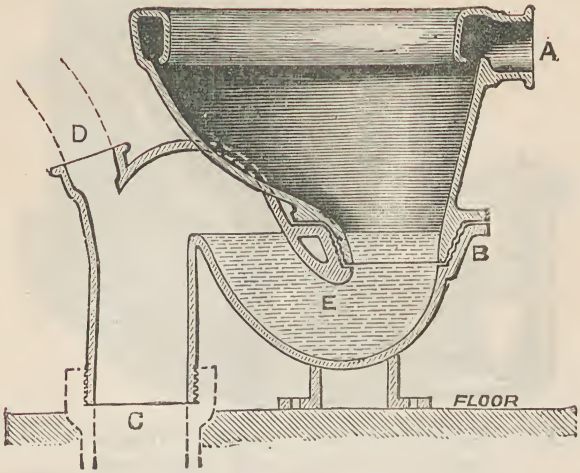
EXTRAS.

If with 1½-in. supply valve 3 0

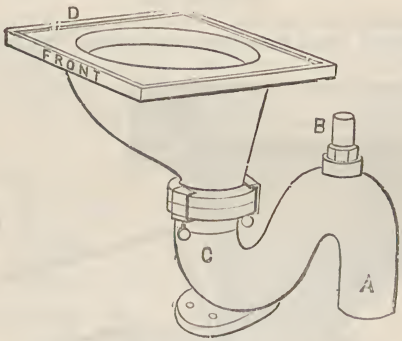
If with short piece of 1½-in. bent lead service-pipe, and soldered joint to valve 5 0



No. 57a.—HELLYER'S Patent "Hygienic" white-ware Closet-basin, with lead "Anti-D-trap," for connection with lead soil-pipe £1 0 0



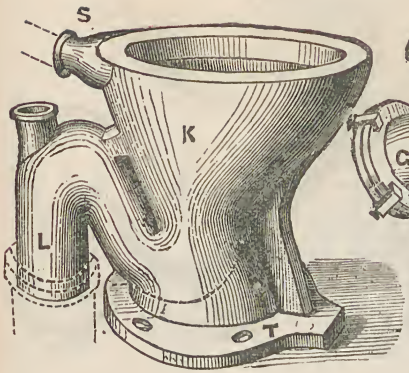
No. 58.—HELLYER'S Patent "Hygienic" white-ware Closet-basin and Trap, with improved jointing (for connection with the drain, where its jointing can always be seen) £0 18 0



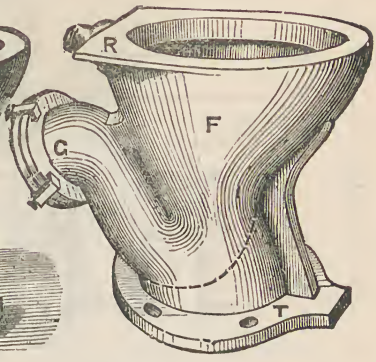
No. 58a.—HELLYER'S Patent "Hygienic" white-ware Closet-basin, with "table-top," and strong white-ware trap and brass clips £1 10 0

No. 58b.—Ditto, ditto, but with lead "Anti-D-trap," for connection with lead soil-pipe 1 10 0

If with 1½-in. supply valve, copper regulator, on cast-iron frame, and with ebony knob and brass guide-pull, for working through stile, to supply either of the above closets ... extra 1 18 0



No. 58c.



No. 58d.

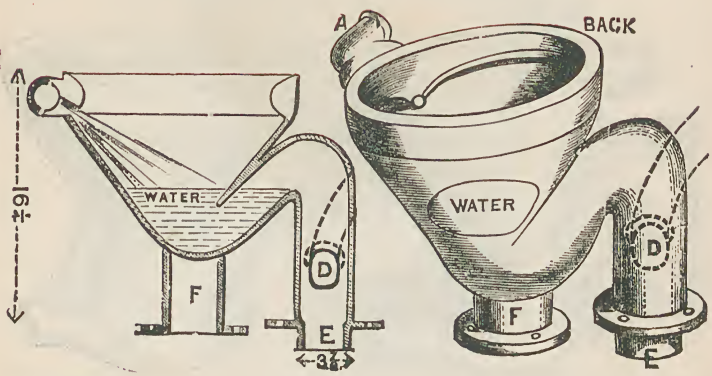
No. 58c.—HELLYER'S Patent "Pedestal Hygienic" Closet in white-ware, with plain outlet, L, for connection with drain, and with socket vent ... £1 8 0

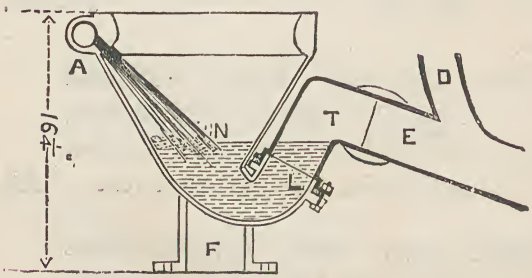
No. 58d.—Ditto ditto but with corners at top, R, and with flange outlet, for connection to lead soil-pipe, with galvanized iron collar, packing, and clips 1 13 0

EXTRAS.

If either the above closets are coloured both inside and out ...	0 10 0
If coloured *inside* only	0 5 0
If with 1½-in. supply valve, copper regulator, and ebony pull-up knob, &c., complete	1 18 0
If with Hellyer's patent strong galvanized cast-iron syphon-cistern, "Angle" or "Flat back," for giving a three-gallon flush, with hard-wood pull	2 2 0
If ditto "Angle-syphon" *two*-gallon flush, with brass waste-preventing valve to meet Water Companies' requirements...	2 5 6

N.B.—A larger ball valve is made for low pressure.



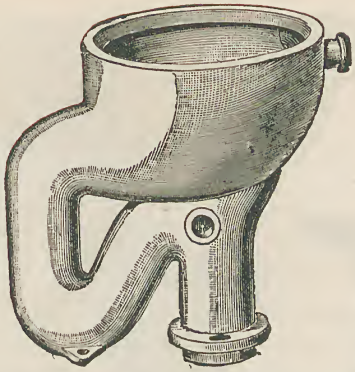


No. 59.—HELLYER'S Patent "Vortex" Closet and Trap in one piece, white inside and out £1 10 0

EXTRAS.

If with *lead outgo*, T, for connection to lead soil-pipe	0	12	0
If coloured inside...	0	7	6
If with 1½-in. supply-valve, and copper regulator, pull-up ebony knob, and brass guide to fix through stile, complete	2	3	0
If with 2-in. supply-valve	0	5	0

When the head of water is under 4 feet, a 2-in. valve should be used, and 2-in. service pipe; but when it is over 4 feet, an 1½-in. valve is quite large enough if with 1½-in. service-pipe to it.

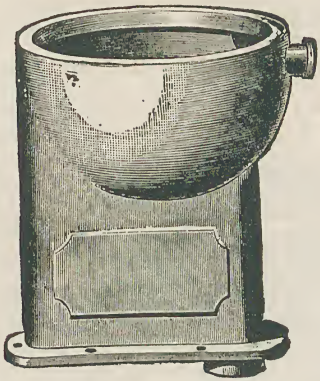


No. 59a.—The "Emperor" Wash-out Closet, in one piece of earthenware, with side outlet.

White or ivory	each	19/0
Printed inside	,,	22/6
Printed inside and out	,,	27/6

Height, 17⅜-in.; Basin, 16-in. × 14½-in.

Ventilating Pipe, 1/0 extra.

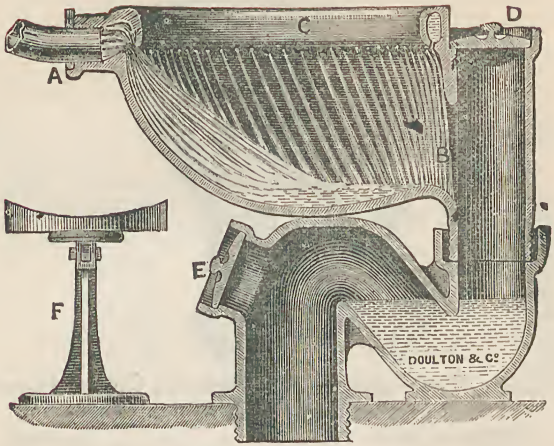


No. 59b.—The "Sultan" Wash-out Closet, in one piece of earthenware, with front outlet. Can be made to shoot out similar to a P trap.

White or ivory	each	19/0
Printed inside	,,	22/6
Printed inside and out	,,	27/6

Height 16⅛-in.; Basin 16½-in. × 14-in.

Ventilating Pipe, 1/0 extra.



No. 62.—The Lambeth Improved "Flush Out" Closet.

The water enters the basin at the flushing arm A, exactly opposite to the discharge opening B, and by this means the whole power is utilised and a perfect flush obtained.

The flushing rim C is so formed as to wash the whole surface of the basin, at the same time allowing the main volume of the water to discharge immediately opposite the outlet.

Over the discharge opening is a plate D, which on removal gives access to the trap below, and allows of its being cleansed, should foreign matter have been thrown into the basin. This prevents such matter being carried into the drain, with the probability of causing a stoppage where it cannot easily be got at.

The Closet may be had with trap to shoot out or down, and a socket E is provided for inspection or ventilation, the trap being in every case made loose. A light iron standard F is provided (when required) on which the basin stands, so that the trap may be turned any way to suit position of soil pipe. This arrangement is further facilitated by the basin being circular on top.

Basin and trap in strong stoneware with iron standard, if required ... ...each	£0	12	6
White basin and cane trap ... ... ,,	0	19	6
Blue ,, ... ,,	1	4	0
Fancy ,, ... ,,	1	6	0
White and gold basin ... ... ,,	1	15	0

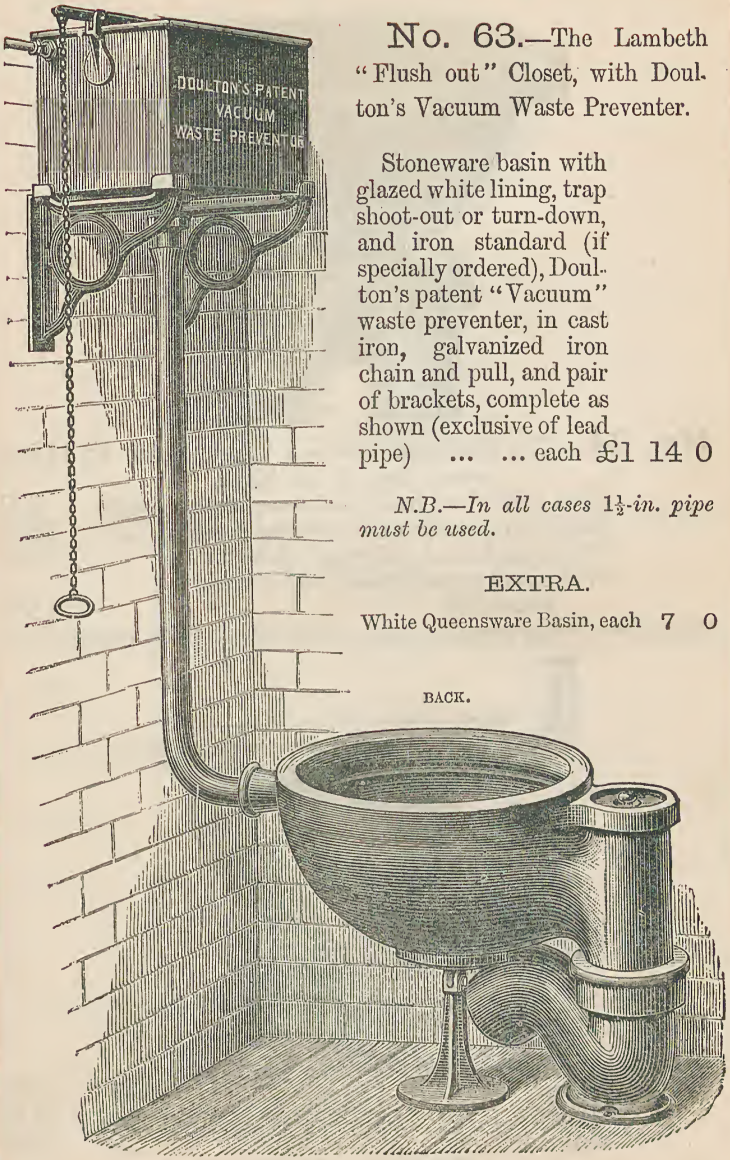
The Traps are made both P and S shape.

The Iron Standard F is not sent unless specially ordered.

DIRECTIONS FOR FIXING.—In fixing the Closet, care must be taken that the service pipe is so directed as to cause the water to strike the flushing rim of basin and rebound to centre as shown. The service pipe should enter the arm of basin in a straight line.

In all cases 1½-in. Pipe must be used.

N.B.—This Closet* MUST *be flushed with a flushing cistern, and not by a Valve.



No. 63.—The Lambeth "Flush out" Closet, with Doulton's Vacuum Waste Preventer.

Stoneware basin with glazed white lining, trap shoot-out or turn-down, and iron standard (if specially ordered), Doulton's patent "Vacuum" waste preventer, in cast iron, galvanized iron chain and pull, and pair of brackets, complete as shown (exclusive of lead pipe) ... ... each £1 14 0

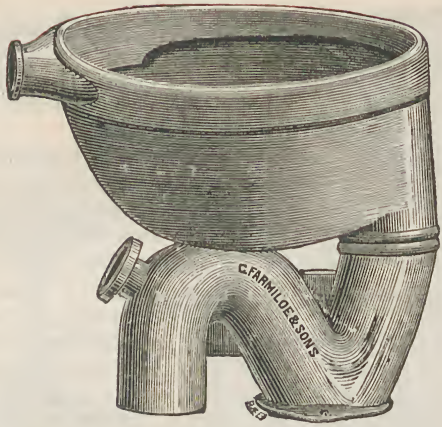
N.B.—In all cases 1½-in. pipe must be used.

EXTRA.

White Queensware Basin, each 7 0

BACK.

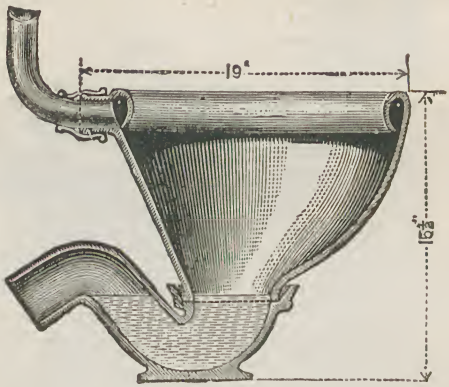
FRONT.



No. 64.—The Eastwood Sanitary Closet, 16-ins. by 14-ins. across top, 17-ins. high.

Cane and white basin and cane trap ...	each	9/9
Cane and printed basin and cane trap	,,	12/9
White basin and cane and white trap	,,	12/9
White and printed basin and cane and white trap	,,	15/9

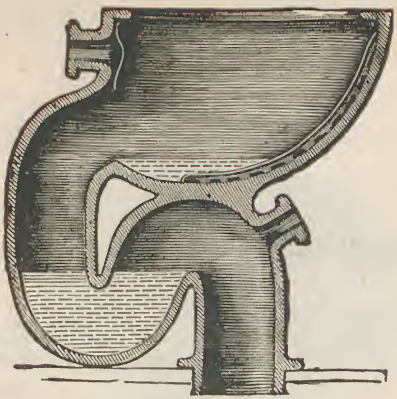
Cane basins without traps, 2/0 less. White basins without traps, 3/0 less



No. 65.—The Household Closet.

White	each	12/0
Printed	,,	13/6
White and gold	,,	16/6

Without traps, 4/6 less.



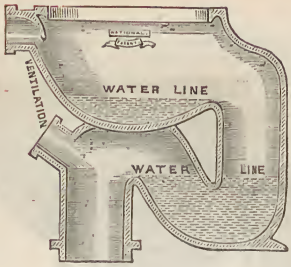
No. 66.—JENNINGS' Patent Earthenware "Monkey" Closet and Trap.

With large supply inlet, perforated flushing rim, and ventilating socket.

Cane and white ... ... each	£1	1	0
White ... ... „	1	4	0
Blue ... ... „	1	12	6

EXTRAS.

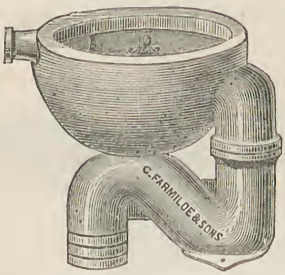
	FLAT PLATE.	SUNK DISH.
Jennings' Patent Stool Cocks for ditto, ¾-in., each	15/0	18/0
„ „ „ „ 1-in. „	21/0	25/0
Jennings' Patent Water Waste Preventing Stool Cock ... ... each		25/0
„ Seat-Action Valve Arrangement ... ... „		50/0



No. 67.—The "National" Patent Side Outlet Closet, with Trap.

An important alteration has been made in the flushing arrangement of this Closet. The supply is now placed opposite the outlet, and a new Registered Fan attached, which makes the Closet more effective.

	WHITE.	BLUE OR MARBLE.	FANCY.
In one piece of earthenware, ... each	30/0	36/0	42/0
In two pieces (cane trap, either S or P shape)... ... ... „	19/3	24/0	30/0

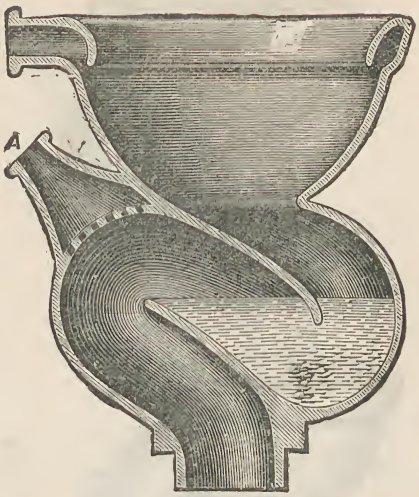


No. 68.—The "Crown" Patent Closet and Trap, with registered flush.

Cane and white... ... ... each	10/6
„ „ blue ... ... „	13/0
White... ... ... „	13/6

Without trap 2/6 each less.

N.B.—1¼-*in. Pipe must be used with either of the above Closets.*



No. 70.—Winn's Patent "Complete" Sanitary Closet.

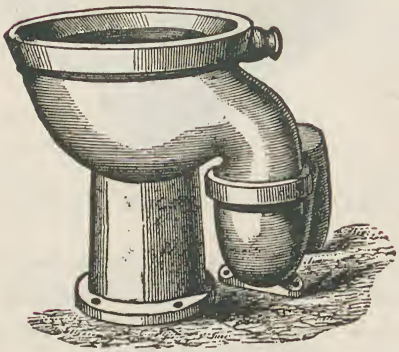
It is one piece of earthenware, entire in itself, trapped above the floor line, and the inlet and outlet of the trap being central with the basin, it is readily and cheaply fixed, and can be used to replace existing closets with little expense.

It is perfectly trapped, and narrowest at the inlet, so that stoppage is scarcely possible. At the apex of the trap a deoderizing chamber is provided, to be filled with charcoal, with an outlet (A) for ventilation to the external air. There are no spaces where soil can in any way lodge or accumulate.

The soilable area of closet is very small, the flushing appliance of the very best known kind, and the whole force of the water concentrated where most required. After use the whole of the water, soil, &c., passes entirely from sight.

White	each	£1 17 6
Printed	„	2 2 6

No. 200.



No. 201.

No. 71.—Woodward's Patent Wash-out Closet.

It is important that the supply pipe should not be less than 1¼-in.

These closets are made with P or S traps, which are fitted with ventilating sockets if required.

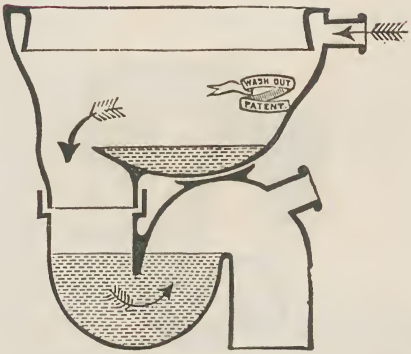
	WHITE.	BLUE.	FANCY.
No. 200.—Basin and trap only ... each	19/6	22/0	23/0
No. 201.—Basin and trap, with stand for basin, so that trap may turn in any direction, each	21/0	23/6	24/6

Without traps, 3/0 each less; without stands, 1/6 each less.

No. 200 is also made in one piece of earthenware:

White 27/0; Blue 30/0; Fancy 33/0 each.

No. 250.



No. 251.

No. 71a.—New Pattern Patent Wash-out Closet.

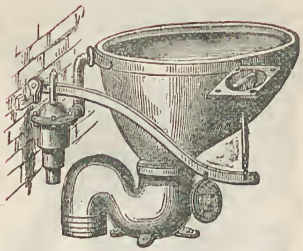
No. 250.—White ... ... each		10/6
Blue ... ... ,,		12/0
Fancy ... ... ,,		13/0

Without traps, 2/6 each less.

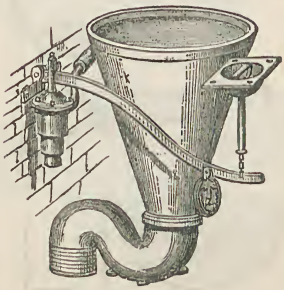
No. 251 is the same Closet as No. 250, but the trap has a pipe for ventilation.

White ... ... each		11/0
Blue ... ... ,,		12/6
Fancy ... ... ,,		13/6

Without traps, 3/0 each less.



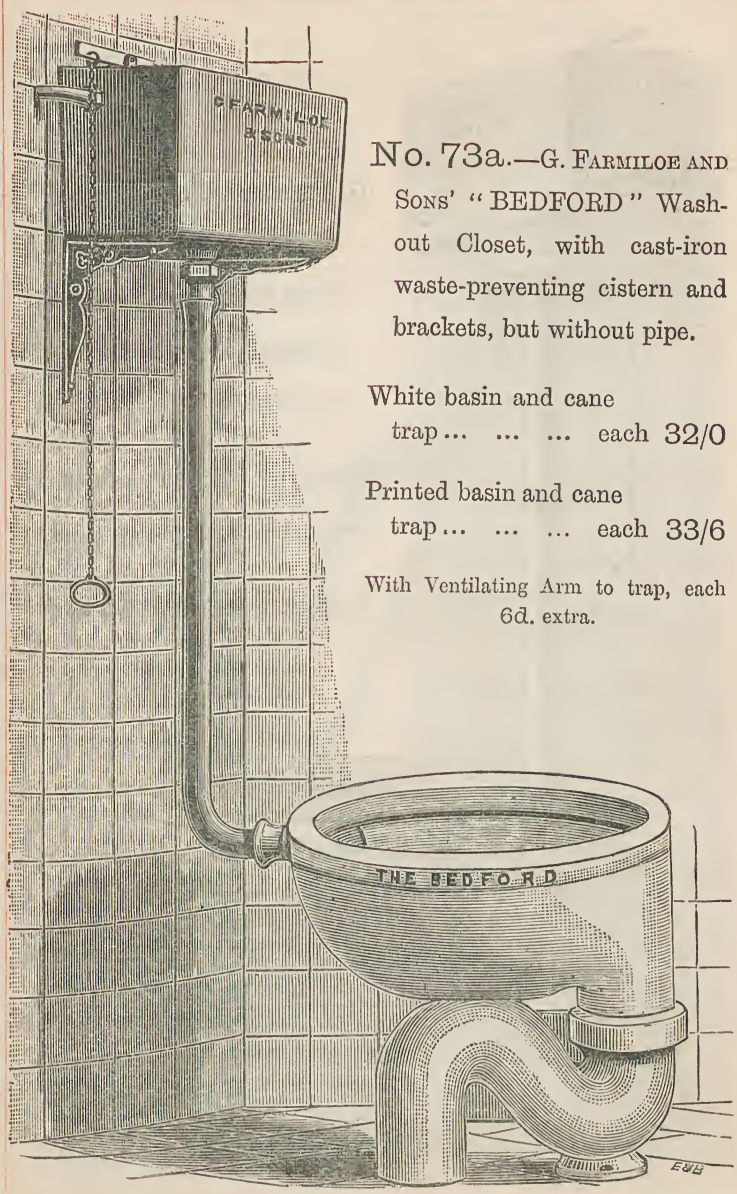
No. 72.—Cane and White Cottage Basin and Trap, with ¾-in. cottage valve, with lever and weight, and iron sunk dish, complete, each 9/0



No. 73.—Cane and White Hopper and Trap, with ¾-in. cottage valve, with lever and weight, and iron sunk dish, complete ... ... each 8/3

EXTRAS.

1-in. Valves	each				2	0
Brass Sunk Dishes	„				1	6
Large ditto, with Opal Handle	„				4	0
Inlet of Valves, Screwed for Iron	each, ¾-in.	0	6	1-in.	0	9
Unions on Inlets „	„	1	6	„	2	0

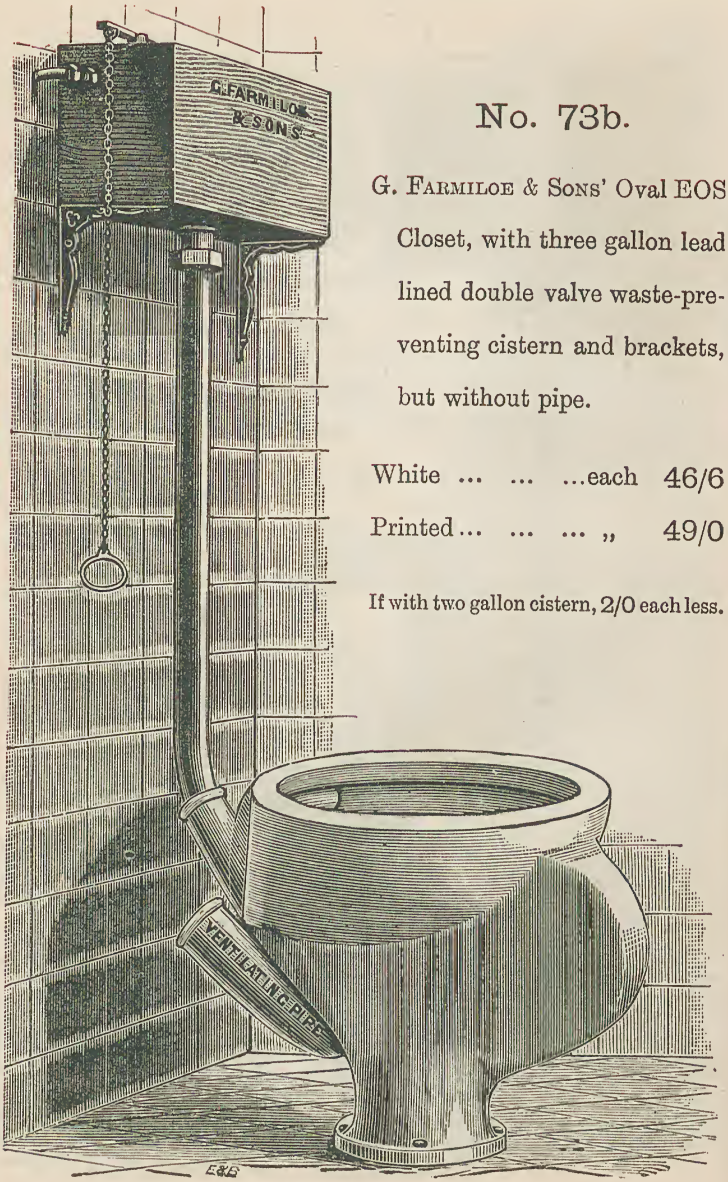


No. 73a.—G. FARMILOE AND SONS' "BEDFORD" Wash-out Closet, with cast-iron waste-preventing cistern and brackets, but without pipe.

White basin and cane trap ... ... each 32/0

Printed basin and cane trap ... ... each 33/6

With Ventilating Arm to trap, each 6d. extra.



No. 73b.

G. Farmiloe & Sons' Oval EOS Closet, with three gallon lead lined double valve waste-preventing cistern and brackets, but without pipe.

White ... ...each	46/6
Printed ... ... „	49/0

If with two gallon cistern, 2/0 each less.

No. 73c.

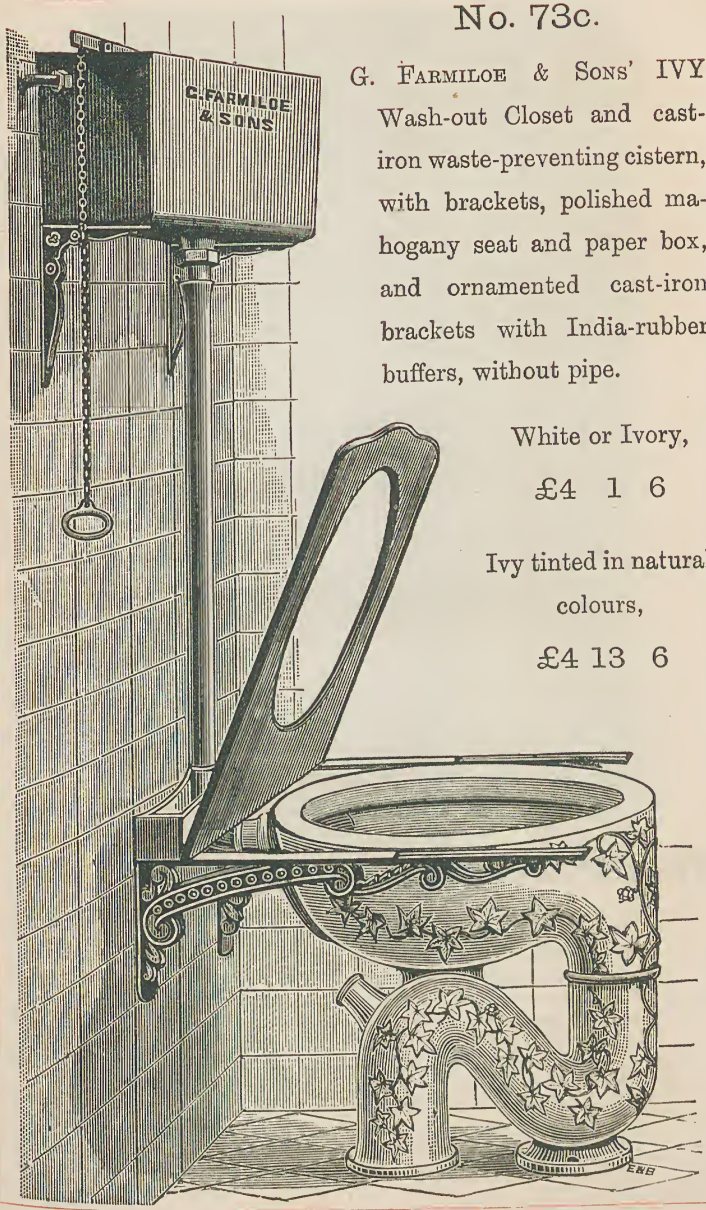
G. Farmiloe & Sons' IVY Wash-out Closet and cast-iron waste-preventing cistern, with brackets, polished mahogany seat and paper box, and ornamented cast-iron brackets with India-rubber buffers, without pipe.

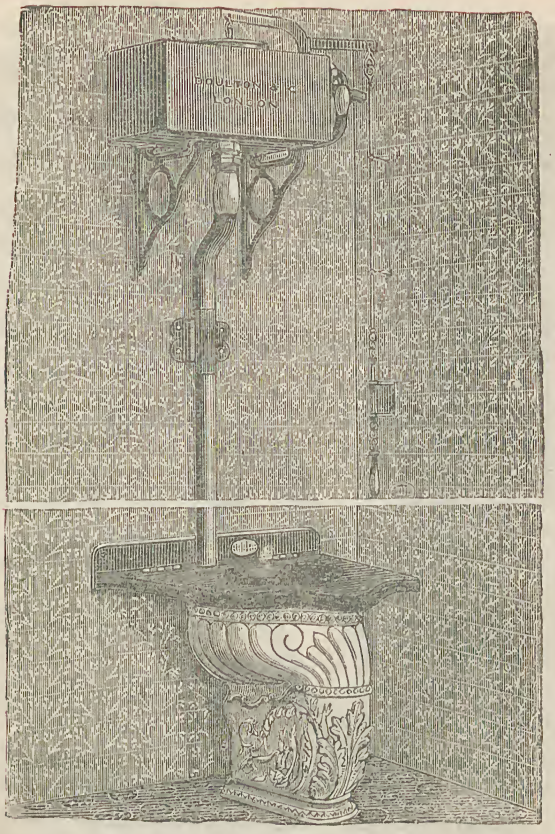
White or Ivory,

£4 1 6

Ivy tinted in natural colours,

£4 13 6



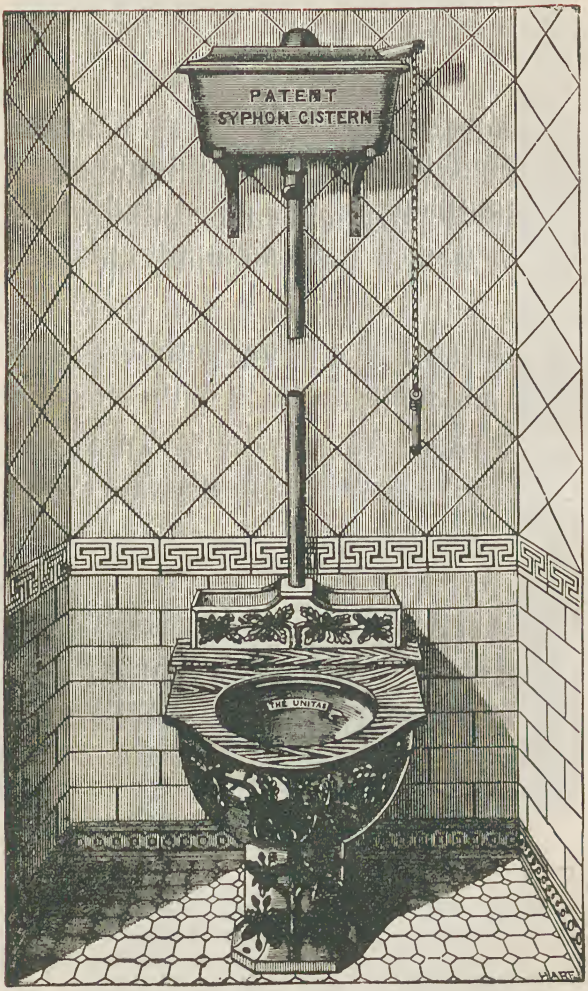


No. 73d.—Doulton's Combination Closet.

I. Ornamented basin and trap, mahogany seat, water waste-preventer, and seat-action, complete ...	£4	18	2
II. Ornamented basin and trap, mahogany seat and 59x water waste-preventer, brackets, and pull on plate	4	9	8
III. Ornamented basin and trap, pine seat, and 59x water waste-preventer, brackets and pull on plate ...	3	12	8
IV. Plain basin and trap, mahogany seat, 59x water waste-preventer, brackets, and pull on plate ...	3	16	2
V. Plain basin and trap, pine seat, 59x water waste-preventer, brackets, and pull on plate	2	19	2
VI. Plain basin and trap, pine seat, 59x water waste-preventer, brackets, and chain pull	2	13	0

No. 73e.—JENNINGS' Pedestal Vase Closet.

White-ware closet, with polished birch seat, &c., waste-preventing cistern, and 1½-in. down service complete	£5	12	6
If with 1¼-in. "press-down" or "lever action" regulating supply valve in place of cistern and down service...	5	0	0
"Pedestal Vase" (earthenware basin and trap only), blue flowered ...	3	3	0
Do. blue flowered outside, white inside	3	0	0
Do. all white	2	2	0



No. 73f.—The Unitas Closet.

For prices see next page.

No. 73f.—The Unitas Closet.

PRICES.	BASINS AND TRAPS. One Piece.	Two Pieces.	Paper Boxes.
No. 1, with Raised Ornamentation.			
White	40/0	27/0	7/0
,, with Raised Ornamentation Coloured	67/6	45/0	11/6
Ivory	47/6	31/6	7/6
,, with Raised Ornamentation Coloured	75/0	50/0	12/6

EXTRAS.

Basins printed inside Blue, 6/0 Flown colour, Ivy pattern, 12/0

No. 2, Plain.			
White	36/0	23/6	6/6
Ivory	42/6	27/6	7/0

EXTRAS.

Basins printed inside Blue, 6/0 Flown colour, Ivy, 12/0

Printed outside and inside of basin Blue or Brown	56/0	43/0	8/0
Marble printed, outside and inside of basin	51/0	38/0	8/0

No. 3, Strong Fire Clay.			
Yellow outside, and White inside	30/0	19/3	6/0

EXTRA.

Basins Blue printed inside, 6/0

Seats, as shown	Mahogany.	Walnut.	Dantzic Oak.	Plain Deal.
	18/0	18/0	21/0	12/0
With hinged cover	36/0	36/0	42/0	24/0

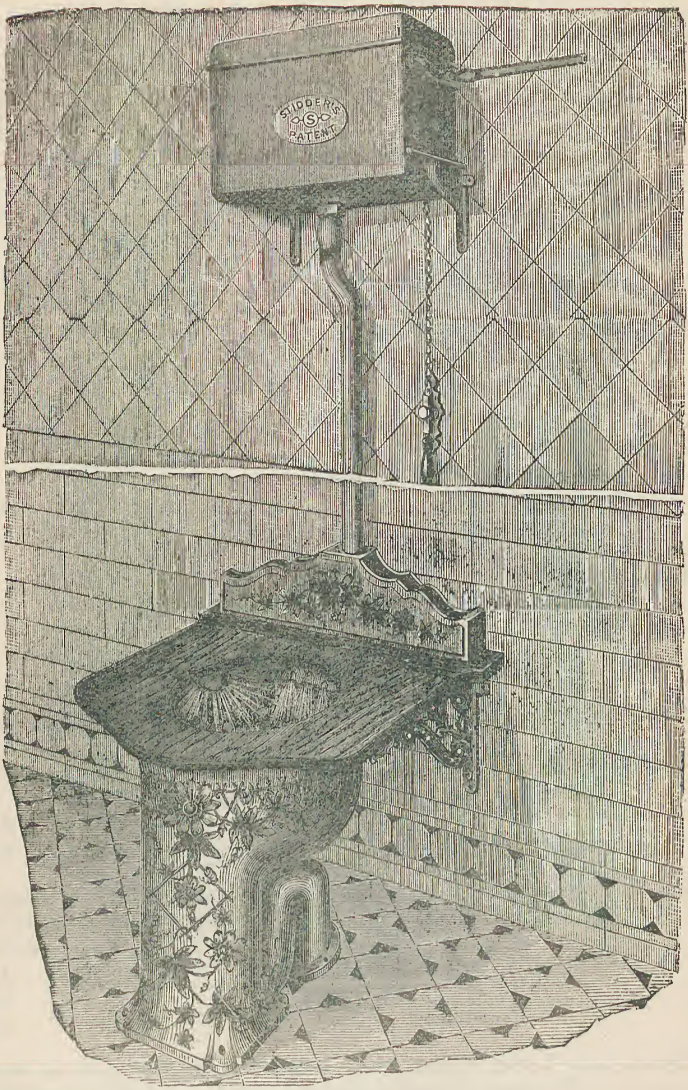
Ornamental Seat Brackets, with improved rubber buffers,

painted	6/0
Galvanized	8/6

Cast-iron Syphon Cistern, for "Unitas,"	Painted.	Galvanized.
To hold 2 gallons	each 20/0	28/0
,, 3 ,,	,, 23/0	31/0
Brackets for cisterns, painted	per pair	1/6
,, ,, Galvanized	,,	2/6
Chain pull and handle, Ivory	complete	2/0

Patent India Rubber Connection, for connecting the supply arm of closet basin to the flushing or service pipe, and also for connecting ventilating socket to air pipe.

1-in.	1¼-in.	1½-in.	2-in.
16/6	18/0	30/0	42/0 per dozen.



No. 73g.—The Nile Closet, STIDDER's Patent.

For prices see next page.

No. 73g.—The Nile Closet, with Stidder's patent flushing fan at back, and spreading flushers at side of basin.

PRICES.

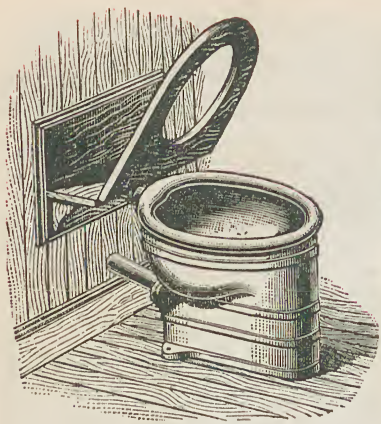
Closet only, "Queen's" ware, white ... ... each	£2	0	0
,, ,, ivory ... ... ,,	2	5	0
,, ,, printed with passion flower design in blue or mauve ... ... each	2	10	0
,, ,, Ditto, enriched with gold ... ,,	4	10	0
,, ,, with embossed passion flowers, white each	2	5	0
,, ,, Ditto ditto ivory ,,	2	10	0
,, ,, Ditto, printed in blue or mauve ,,	3	0	0
,, ,, Ditto, ditto, enriched with gold ,,	5	5	0
Paper Box, ,, white ... ... ,,	0	6	0
,, ,, ivory ... ... ,,	0	7	6
,, ,, printed with passion flowers, blue or mauve ... ... each	0	9	0
,, ,, Ditto, ditto, enriched with gold, ,,	0	17	6
,, ,, with embossed passion flowers, white ... ... ,,	0	7	0
,, ,, Ditto ditto ivory ,,	0	8	6
,, ,, Ditto, printed in blue or mauve ,,	0	11	6
,, ,, Ditto, ditto, enriched with gold ,,	1	1	0
,, in best pine, plain or varnished ... ... ,,	0	3	0
,, ,, mahogany, polished ... ... ,,	0	5	0
Seat, in best pine, plain or varnished... .. .. ,,	0	14	6
,, ,, mahogany, polished ... ... ,,	1	0	0
Brackets, ornamental cast iron, to fix to partition or to build in wall ... ...per set	0	6	0
Syphon Water Flusher, two gallons, cast iron painted, with cover, brass chain pull, guide plate to fasten to wall, and ebonized handle, 1¼-in. outlet ... ... each	1	7	6

EXTRAS.

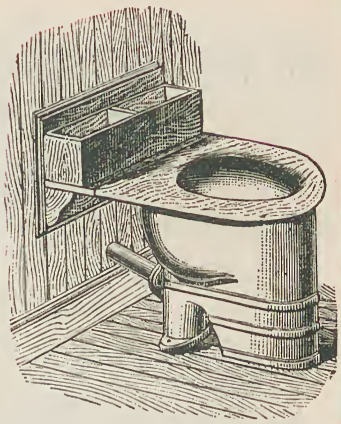
Syphon Water Flusher, with 1½-in. outlet ... ... each	0	2	6
Cast iron Brackets, for fixing same ... ... per pair	0	1	9
Galvanized Syphon Flusher, cover and brackets ... ... each	0	7	6

Patent Lead Closet Arm and strong India-rubber Cone included with Closet.

N.B.—The Nile Closet can be printed in any colour and to any design, to suit tiles, or other decorations.



No. 1.



No. 2.

No. 73h.—Patent Tubal Closet, in one heavy solid piece of fire clay, unbreakable, white enamelled inside.

This Closet is constructed to combine the properties of a most perfect wash-out closet with strength, durability, and compactness.

It is constructed with either an S or P Trap.

It is usually sent out with cast-iron galvanized caps and nozzle-pieces, for discharge or ventilating outlet.

It is also made with floral ornamentation outside.

It is shown here with hinged seat, and serves the purposes of *closet*, urinal, and slop sink.

	EXTERIOR. With raised bands as shown.	With raised ornament.
No. 1 Closet only	£1 14 0	£1 17 0
No. 1, with patent bottom stream and after flush	1 16 6	1 19 6
Polished hardwood seat for above, as shown... ...	0 13 6	
,, ,, ,, with paper boxes	0 16 0	
,, mahogany ,, for above, as shown... ...	0 16 0	
,, ,, ,, with paper boxes	0 18 6	
Special double mahogany seat for above	1 4 0	
,, ,, ,, ,, with paper boxes	1 7 0	

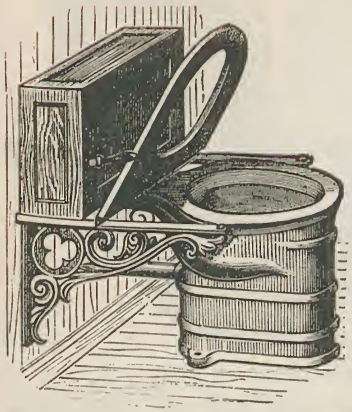
Note.—These seats are all made to fix without the usual brackets.

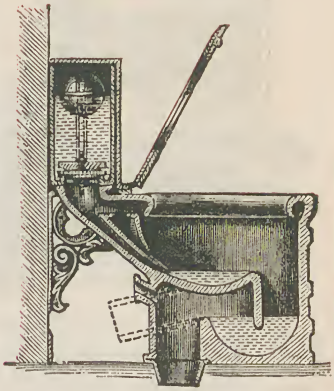
Tubal Closet, No. 2, in one solid piece of white Porcelain.

No. 2 "Tubal" Closet is exactly similar in action to No. 1 Closet. The only material difference being that it is of white earthenware, and not so heavy and strong.

	White.	Printed inside and outside.
No. 2 Tubal Closet, white earthenware inside and outside	£1 17 0	£2 15 0
No. 2 ditto with special patent branch and connection...	1 19 6	2 17 6

Seats for No. 2 Tubal Closet same as for No. 1, given above.





No. 73J.—Patent "Imperial" Closets and Supply Cistern combined.

These are very useful where it is not convenient to fix an ordinary cistern at the height necessary for properly flushing the closet. The closets are made in one strong solid piece of fire clay, enamelled white inside and on rim, and the outside glazed. They are very suitable for fixing without enclosure.

With single valve cistern in cast iron, painted, without wood work ...each	£3	2	6
With double valve ditto ditto ... ,,	3	7	6
Plain stained wood casing for cistern, and hinged mahogany seat ... ...each	1	2	0
Polished mahogany casing and seat ... ,,	1	12	0
Ornamental Brackets with india rubber buffers ... ... per pair	0	6	0

EXTRAS.

If with galvanized cistern ... ... each		4	6
,, copper ,, ... ,,		10	0

No. 73K.—Hopper Closet and Cistern combined.

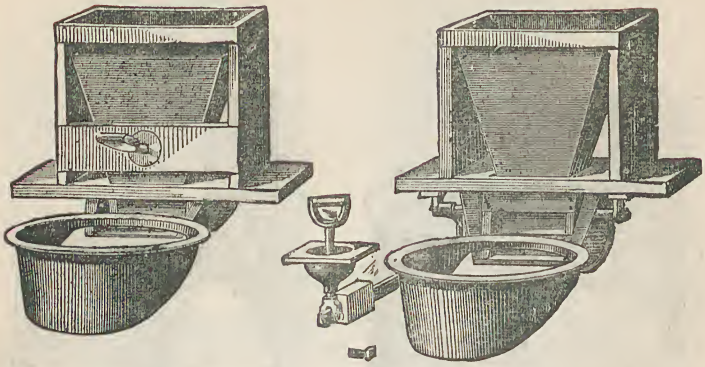
Cane and white hopper, and single valve cast iron cistern ... ...each	£1	5	0
Ditto, double valve, ditto ... ,,	1	10	0

EXTRA.

Cane and blue Hopper ... ... each		1	0

The above system is also applied to Valve Closets.

EARTH CLOSETS.



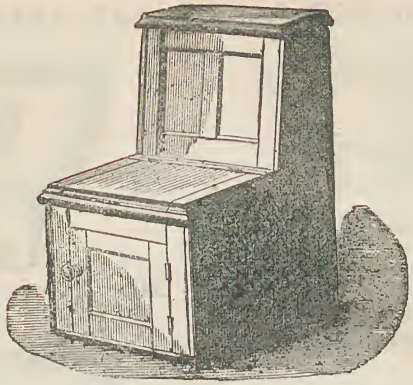
No. 74.—Moule's Earth Closet Apparatus only.

When ordering Apparatus, state whether it is proposed to fix the same over a vault, or whether over a tank or pail.

	£	s.	d.
Apparatus No. I., "Pull-Out" with Galvanised Iron Rim, and Iron Handle ... ... each	1	6	0
Apparatus No. Ia., "Pull-Out," with Galvanised Iron Rim, and Iron Handle, and Deal Seat, on Bearers, fixed ready for placing in position ... ... each	1	15	0
Apparatus No. II., "Pull-Up" (new patent), with Galvanised Iron Rim, and Iron Handle ... ... each	1	16	0
Apparatus No. IIa., "Pull-Up" (new patent), with Galvanised Iron Rim, and Iron Handle, and Deal Seat, on Bearers, fixed ready for placing in position ... ... each	2	8	6
Apparatus No. III., "Self-Acting" (new patent), with Galvanised Iron Rim, and Deal Seat ... ... each	2	5	0
Apparatus No. IIIa., "Self-Acting" (new patent), with Galvanised Iron Rim, and Deal Seat, on Bearers, fixed ready for placing in position, each	2	15	6
Apparatus No. IV., "Pull-Up" (new patent), with White Earthenware Rim, and Best Handle... ... ... each	2	4	0
Apparatus No. IVa., "Pull-Up" (new patent), with White Earthenware Rim, and Deal Seat, on Bearers, fixed ready for placing in position, each	2	16	6
Apparatus No. V., "Self-Acting" (new patent), with White Earthenware Rim, and Deal Seat ... ... each	2	10	0
Apparatus No. Va., "Self-Acting" (new patent), with White Earthenware Rim, and Deal Seat, on Bearers, fixed ready for placing in position ... ... each	3	0	0
Apparatus No. IX., "Pull-up" (new patent), with White Earthenware Rim, Galvanised Iron Valve beneath the Rim, best Handle, and Teak or Mahogany Seat, 3-ft. wide, on Bearers, fixed ready for placing in position ... ... each	6	0	0
Cost of fitting a set of Apparatus into a Closet over a Vault, including the cost of the Bearers and Risers, &c, but exclusive of the cost of the Apparatus—In Deal... ... ... from £2 5s. to	3	5	0
Cost of fitting a set of Apparatus into a Closet over a "Broadmoor" Tank, including the cost of the Bearers and Risers, &c., but exclusive of the cost of the Apparatus—In Deal ... ... from £3 to	4	0	0

N.B.—The Prices given on this page do not include the cost of any receptacles. For the cost of various kinds of receptacles, see next page.

N.B.—When ordering any receptacle, state whether it is proposed to remove



the same from the front, from the back, or from the side of the closet.

No. 75.—Moule's Earth Closet Commodes.

	£	s.	d.
Commode No. I., "Pull-Out," in plain Deal (Unvarnished) with Iron Handle and Iron Rim, each	2	14	0
Commode No. II., "Pull-Up," (new patent), in plain Deal (Unvarnished), with Iron Handle and Iron Rim ... ... each	3	3	0
Commode No. III., "Self-Acting" (new patent), in plain Deal (Unvrnshd.), with Iron Rim, each	3	10	6
Commode No. IV., "Pull-Up," (new patent), in plain Deal (Varnished), with Brass Handle and Earthenware Rim ... ... each	3	18	0
Commode No. V., "Self-Acting" (new patent), in plain Deal (Varnished), with Earthenware Rim ... ... each	4	5	0
Commode No. VI., "Pull-Up," (new patent), in panelled Deal (Varnished), with best Brass Handle,& Earthenware Rim,each	5	0	0
Commode No. VII., "Self-Acting" (new patent), in panelled Deal (Varnished), with Earthenware Rim ... ... each	5	8	0
Commode No. X., "Pull-Up," (new patent), in panelled Teak or Mahogany (French Polished), of the very best make ... each	8	7	6
Commode No. XI., "Self-Acting," in Teak or Mahogany (French Polished), of the very best make ... ... each	8	15	0
American Commode, No. I., in Deal (Varnished) ... ... each	4	2	6
American Commode, No. II., in Teak or Mahogany (French Polished) ... ... each	6	12	6

Each Commode, except it be adapted either to a "W. O. Pail," or to a "Broadmoor" Tank, is furnished with a pail.

RECEPTACLES.

Pail, without Cover, in Galvanised Iron, to hold about 12 charges	0	6	0
Pail, with Cover, in Galvanised Iron, to hold about 12 charges...	0	7	6
Earthenware Pail, without Cover, to hold about 12 charges	0	13	6
Earthenware Pail, with Iron Cover, to hold about 12 charges	0	15	0
W. O. Pail, in Galvanised Iron, to hold about 20 charges	0	9	6
Pail for No. IX. Apparatus ...	0	9	6
"Broadmoor" Tank (Nos. 1, 2, and 3), to hold about 44 charges	1	4	6
"Broadmoor" Tank, on wheels (Nos. 1, 2, and 3), to hold about 36 charges	1	10	6
"Broadmoor" Tanks—			
No. 1. *To be removed from the front.*			
" 2. " " *back.*			
" 3. " " *side.*			
"Pipe" Tank, on wheels, to hold about 80 charges	2	2	6
"Urinal" Tank, on wheels ...	2	12	6

SUNDRIES.

Urinal Guard and Grating ...	1	3	6
Stove for Drying Earth (small)	2	17	6
" " (large)	3	7	6
Dustless Earth and Cinder-sifter	1	10	0
Sieve	0	4	6

CLOSET BASINS AND TRAPS.

No. 76.—Pan Closet Basin.

White	each	2/6
Blue	,,	2/9
Fancy	,,	5/6

Fans and Screws for ditto, 6d. per set.

No. 77. — Flushing Rim Pan Closet Basin.

White	each	3/0
Blue	,,	3/3
Fancy	,,	6/0

No. 78.—Hopper, with bent arm as shown, or with flushing rim.

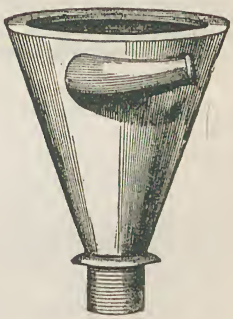
Cane and White ...	each	2/0
S or P trap	,,	1/0

No. 79.—Servants' Basin.

White ... ... each 3/6

No. 80.—Tall Hopper, with straight arm.

Cane and White	each	4/0
White	,,	4/6
Cane and Blue	,,	5/6



No. 81.—Tall Hopper, with bent arm.

Cane and White	each	4/0
White	,,	4/6
Cane and Blue	,,	5/6

No. 82.—Valve Basin

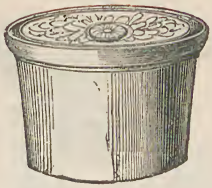
(round or oval.)

White ... ... each	7/0
Blue .. .. ,,	8/0
Fancy ... ... ,,	9/0

A large variety of decorated Basins kept in Stock.

No. 83.—Oval Flushing Rim Valve Basin.

White ... ... each	8/0
Blue ... ... ,,	9/0
Fancy ... ... ,,	10/0
White and Gold line .. ... ,,	15/0



No. 85.—Commode Pan with cover.

In white ware :

	TOP.	BOTTOM.	DEPTH.	EACH
Large	12-in.	10-in.	8-in.	3/4
Small	11-in.	8½-in.	7-in.	2/8

No. 86.—Oval Cottage Basin with flushing rim.

Cane and White, each	2/9
Cane and Blue... ,,	3/6
White ... ... ,,	5/6
White and Blue ,,	6/6

S or P Traps extra.

Cane ... ... each	1/6
White ... ... ,,	3/0

For Enamelled Iron Basins, see page 210.

No. 87.—Pan Basin.

(With Sharpe's patent flushing rim.)

White	each	3/0
Blue	,,	4/0

No. 88.—Oval Basin.

(With Sharpe's patent flushing rim.)

16-ins. by 14-ins. by 12¾-ins high

Cane and White, each		4/0
White	,,	5/0
White and Blue	,,	6/0
S or P Traps	,,	1/3

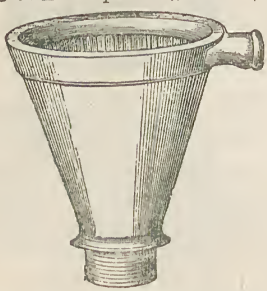
No. 89.—Cottage Basin.

(With Sharpe's patent flushing rim.)

Same Shape as No. 88.

14-ins. by 12¾-ins. by 11½-ins. high.

Cane and White, each		3/0
White	,,	3/6
White and Blue	,,	6/9
S or P Traps	,,	1/3



No. 90.—Tall Hopper.

(With Sharpe's patent flushing rim)

Diameter at top, 13¾-ins.; height 16¾-ins.

Cane and White, each		4/6
White	,,	5/6
White and Blue	,,	6/6

No. 91.—Servants' Basin.

(With Sharpe's patent flushing rim.)

Cane and White, each		4/6
White	,,	5/6
White and Blue	,,	6/6
S or P Traps ...	,,	1/3

No. 92.—Oval Basin.

(With Sharpe's patent flushing rim.)

White	each	6/0
White and Blue	,,	7/6
S or P Traps ...	,,	2/6

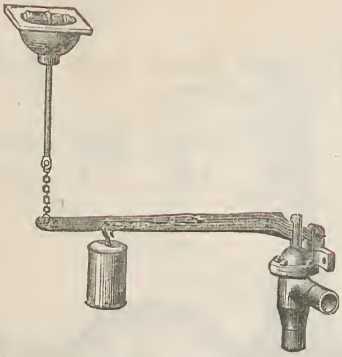
No. 93.—Short Hopper.

(With Sharpe's patent flushing rim.

Diameter 13½-ins.; height 12-ins.

Cane and White, each		3/0
White	,,	4/6
White and Blue	,,	5/6
S or P Traps	,,	1/3

CLOSET VALVES, &c.



No. 102.—Cottage Closet Valve.

With iron dish complete.

¾-in. 5/6, 1-in. 7/6 each.

If with brass dish, 1/6 extra.

If with large brass dish and opal handle, 4/0 extra.

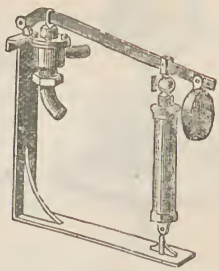
If with inlet screwed for iron, extra, ¾-in., 6d.; 1-in. 9d. each.

If with union on inlet, extra, ¾-in., 1/6; 1-in., 2/0 each.

No. 102a.—Supply Valve, with lever and weight.

(For valve or pan closets.)

	¾-in.	1-in.	1¼-in.	1½-in.
Each	7/0	10/0	14/6	17/6



No. 104.—Closet Valve

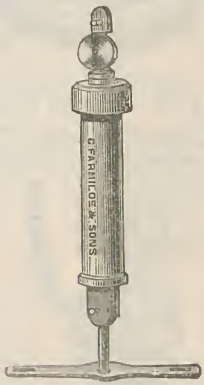
With union.

On iron frame, with zinc bellows or brass regulator.

¾-in. 14/0, 1-in. 17/0 each.

Ditto, with copper regulator.

¾-in. 17/0, 1-in. 20/0 each.



No. 105.—Brass Regulator.

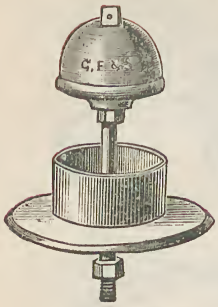
4/6 each.

No. 106.—Zinc Bellows Regulator.

4/6 each.

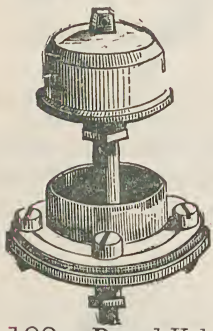
No. 107.—Copper ditto.

7/6 each.

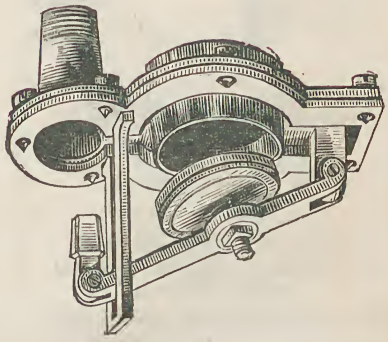


No. 107a.—Light Round Valve, single flange.

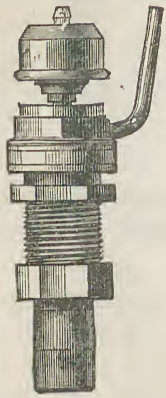
		1-in.	1½-in.	1¾-in.	2-in.
Each	...	1/3	1/6	2/3	2/9



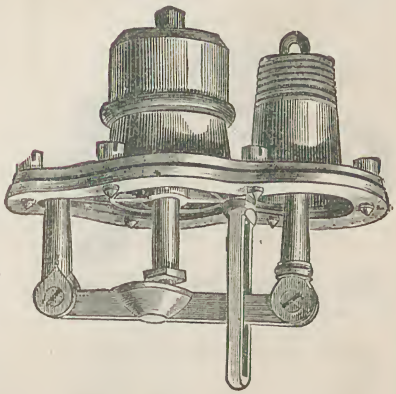
No. 109.—Round Valve.
Light ... ... each 2/6
Best, with Double Flanges and Screws ... ... each 4/6



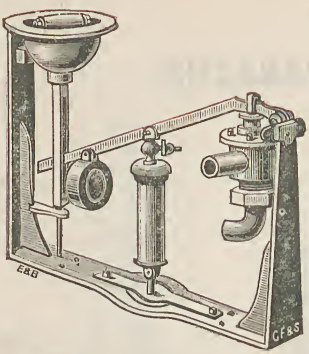
No. 111.—Spring Valve.
9/6 each.



No. 110.—Round Valve.
With Unions for Slate or Iron Cistern, and Air Pipes.
1-in., 5/0; 1¼-in., 7/6; 1½-in., 12/6 each.



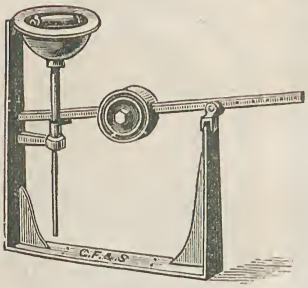
No. 112.—Spoon or Shoe Valve.
8/0 each.



No. 112a.—Handle with Valve and Regulator on iron frame.

¾-in.	valve, brass or bellows regulator, brass sunk dish ...		25/0
1 in.	ditto	ditto	28/0
1¼-in.	ditto	ditto	32/6
1½-in.	ditto	ditto	35/6

Copper regulator, 3/0 extra.



No. 112b.—Handle & Weight, with lever on iron frame, for working waste-preventing or other apparatus, 12/6 each.

Ditto, with extra large dish and glass handle, 16/6 each.

No. 1.

No. 2.

No. 3.

No. 113c.—Sunk Dish Closet Handles.

No. 1, small, brass, 2/3; galvanized iron, each		1/0
,, 2, medium, with earthenware grip	,,	3/9
,, 3, large, with glass grip	,,	7/0

CLOSET APPARATUS.

No. 113.—Ball Levers.

Best	... ... each	1/5
Seconds	... ... „	7d.

No. 114.—Ditto, for slate cisterns.

Best	... ... „	2/4

No. 115.—Cranks.

Best	... ... „	7d.
Seconds	... ... „	5d.

No. 116.—Spring Board ... ... „ 5/0

No. 117.—Rod and Sling ... ... „ 2/2

No. 118.—Copper Pans.

Spun	... ... „	1/6
Hammered light	... ... „	2/6
„ strong	... ... „	3/0

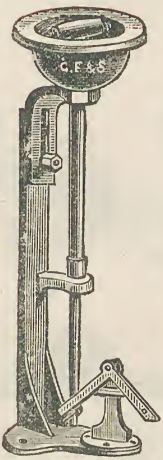
No. 119.—Copper Fans and Screws.

For Pan Closets	... ... „	6d.
„ Valve „	... ... „	1/0

No. 120.—Copper Wire.

Per hank	... ... „	4d.
„ lb.	... ... „	1/2

No. 121.



No. 122.

No. 122A.

No. 122B.

No. 121.—DAY's Patent Novel Valve.

For lead or zinc lead cisterns ... each		2/6
Slate or iron ditto ... ... „		5/0

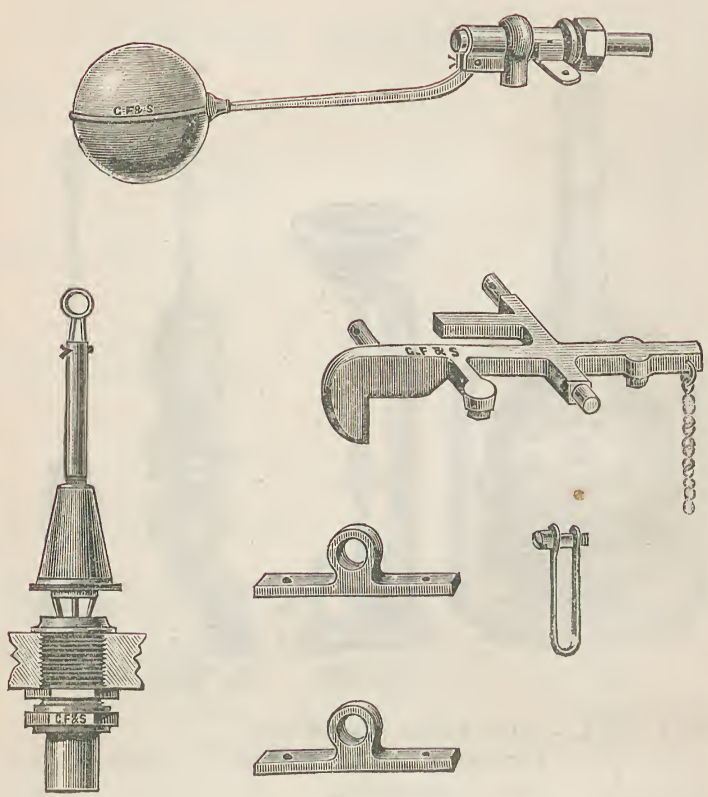
EXTRA.

With after-flush ... ... each	3/0

No. 122.—Brass Sunk Dish and Porcelain Handle, on iron standard, for use with waste preventers ... ... each 8/6

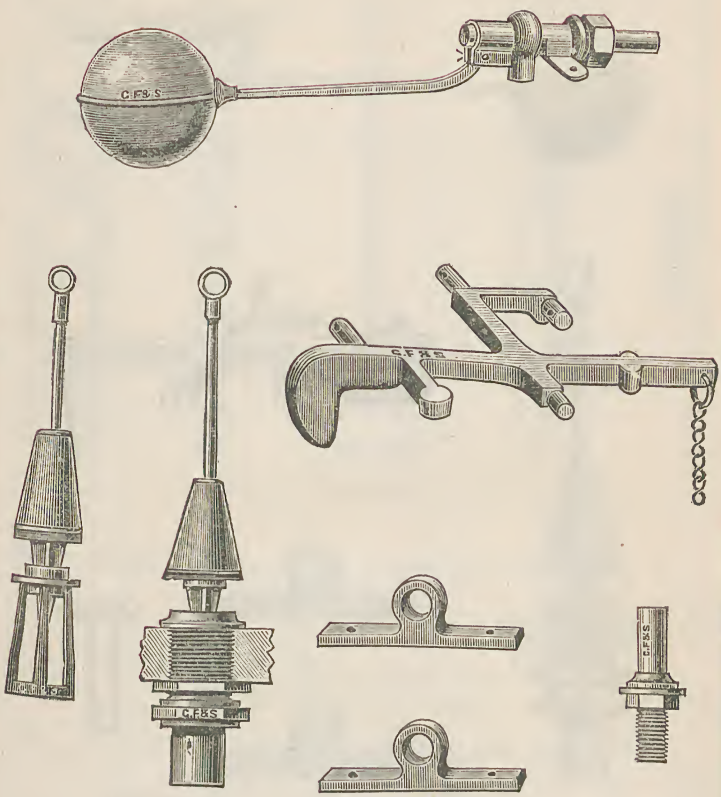
Ditto, with extra large dish and glass handle ... ... each 12/6

Nos. 122a & 122b.—Norwich Cistern Valves. 9/- per pair.

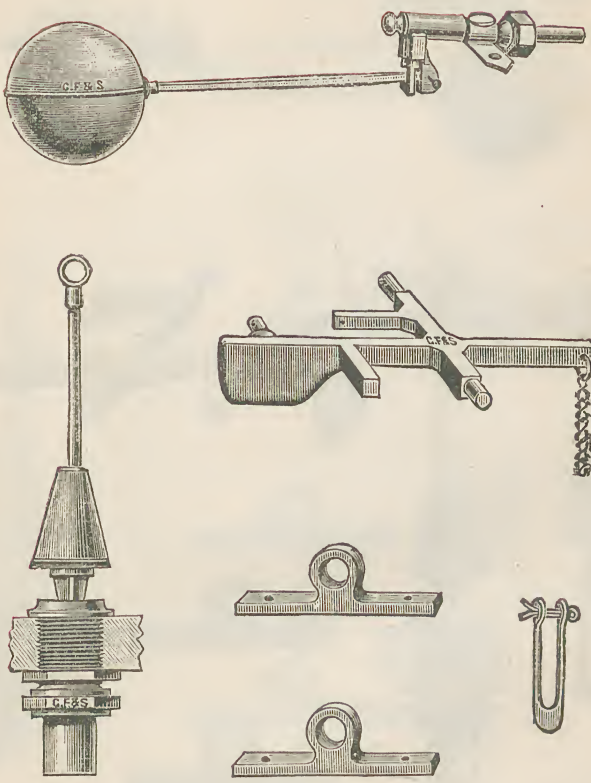


No. 122c.—Fittings for Single Valve, Lead-lined, Waste-Preventing Cistern.

With overflow through valve, as used in Bedford ... ... per set 8/6



No. 122d.—Fittings for Double Valve, Lead-lined, Waste-preventing Cistern, as used in Oxford ... ...per set 10/0



No. 122e.—Fittings for Single Valve, Lead-lined, Waste-preventing Cistern, as used in Reading ... ...per set 9/0

No. 122F.

No. 122G.

No. 122H.

No. 122J.

No. 122K.

No. 122f.—Strong Chain, suitable for Closet Pulls, drawn full size, iron ... ... per yard 0/4
Brass ... ... ,, 1/0

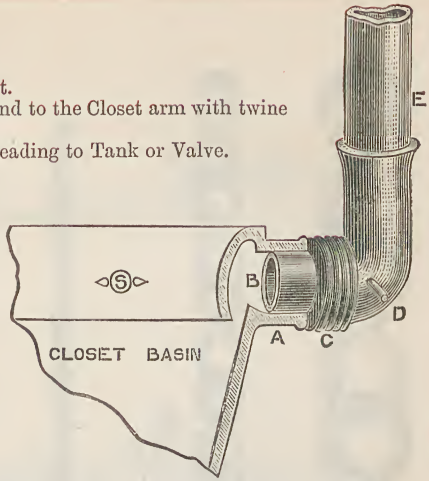
No. 122g.—Light Chain, suitable for Lavatory Plugs, drawn full size, brass ... per yard 0/6

No. 122h.—Galvanized Iron Ring and one yard chain, for Waste-preventing Cistern, each 0/9
Brass, Ditto ... ... ,, 1/9

No. 122j.—Porcelain Pull, and one yard brass chain ... ... each 1/9
Ebony Pull, and one yard plated chain ,, 2/6

No. 122k.—Porcelain Pull, and one yard brass rod on plate ... ... each 6/0
Ebony Pull, with rod and plate, silver plated, each 8/6

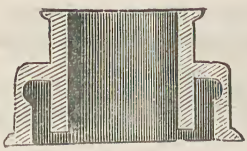
A. Arm of Basin.
B. Inlet to Closet.
C. Rings to secure a good joint.
D. Lugs for drawing up the bend to the Closet arm with twine or copper wire.
E. Joint to lead service pipe, leading to Tank or Valve.



No. 1221.—STIDDER'S Patent Cast-lead Closet Arm Joint, saves a good portion of the time usually occupied in fixing, and results in a better and more secure joint.

1-in. ... ...each	0/11
1¼-in. ... ... ,,	1/1
1½-in. ... ... ,,	1/2

No. 122m.—TWYFORD'S Patent India-rubber Connection.



For connecting the supply arm of closet basins to the flushing or service pipe, and also for connecting ventilating socket to air pipe.

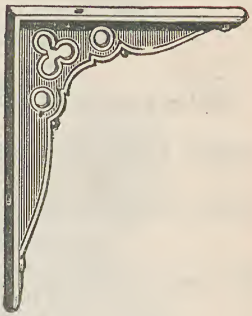
ADVANTAGES:—A perfectly secure and reliable joint, giving absolute security against leakage, without wire or wrapping; dispensing with string, rags, paint, putty, &c.

1-in.	per dozen	16/6
1¼-in.	,,	18/0
1½-in.	,,	30/0
2-in.	,,	42/0

BRACKETS FOR CISTERNS.

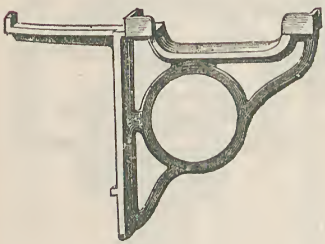
No. 122n.—Cast-iron Bracket.

8-in. by 10-in.... each 8d.



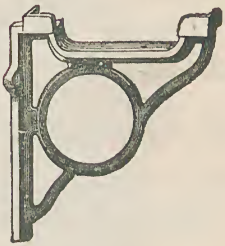
No. 122p.—Cast-iron Bracket.

6-in. by 8-in....each 6d.



No. 122q.—Cast-iron Bracket, to build into wall.

Each 1/1



No. 122r.—Cast-iron Bracket, to screw against wall.

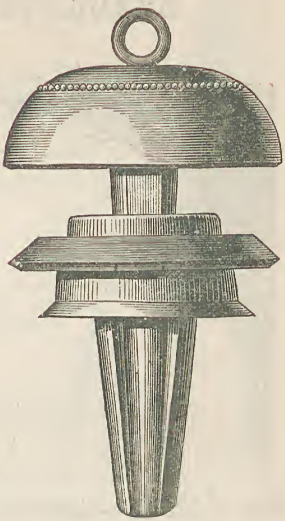
Each 1/1

No. 123.—Grant's Patent Waste Preventing Valve.

Fitted with guard to prevent the weight being pulled too high (*not shown in sketch*).

For lead cisterns ... ... each 2/0

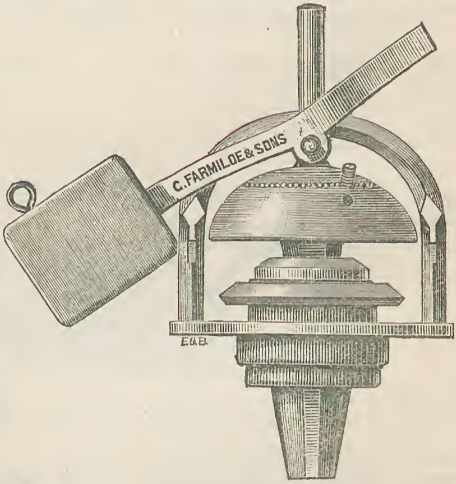
For iron cisterns, with unions each 5/0



No. 124.—

Grant's Patent Waste Preventing Valve.

With after-flush for valve or pan closets, each 15/0



Iron Levers for ditto ... 1/6

When the Handle of Closet is pulled, the Valve is raised to give the FLUSH. It is raised again, when the Handle is let go to give the AFTER-FLUSH. Exactly the same quantity of water is passed each time.

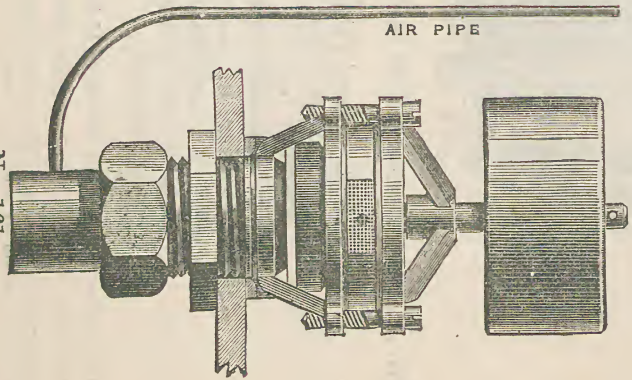
No. 125.—LAMBERT's Patent Waste Preventing Valve.

No. 160.—For soldering to lead cisterns ... ... each 7/3

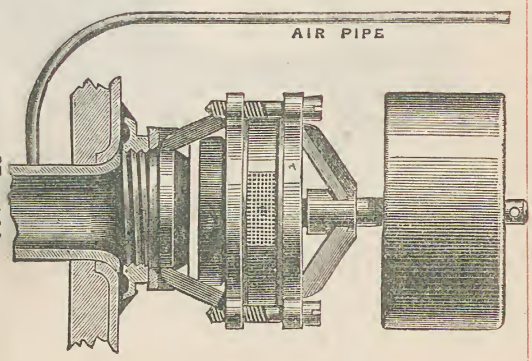
No. 161.—For slate or iron cisterns, with nut and union ... ... „ 9/9

EXTRA.

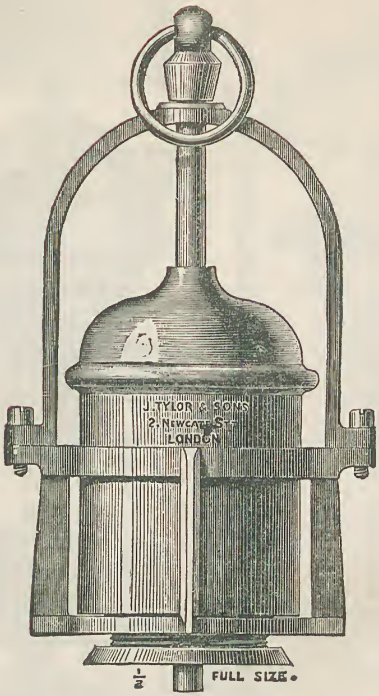
With Trapping Arrangement... ... ... each 2/6



No. 161.



No. 160.



No. 126.—J. Tylor & Sons' Model Waste-not Valve.

J. Tylor & Sons' Patent Model "Waste-not" Closet Valve for fixing in lead cisterns ... ... each	6/6
Ditto, with screw and fly nut for 1¼-in. iron pipe ... ... each	9/8
Ditto, for iron, slate, or zinc cisterns, with screw, fly nut, and union for 1¼-in. lead pipe... ... ... each	11/8

Connection for cistern, if more than 1¼-in. thick, extra.

The screw shown in bottom of Valve is cut to 1¼-in. iron pipe gauge.

When these Valves are fixed in lead cisterns without a screw and fly nut, the joint is made by soldering round the loose connection at bottom of Valve.

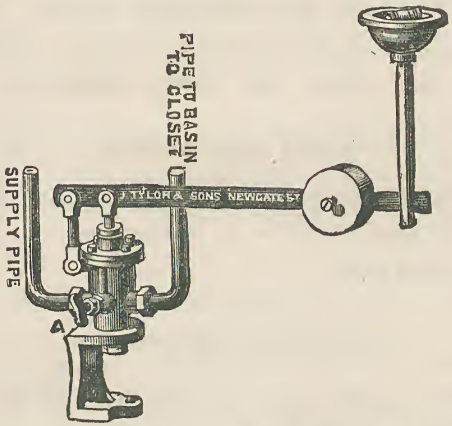
No. 129.—Lambert's Patent "Under the Seat" Water Waste Preventer Closet Valve, giving flush and after-flush.

This Valve is adapted for attaching to ordinary Pan or Valve Closets, and by its use bellows regulators, and cranks and wires are rendered unnecessary; all that is required is to attach it to the arm of a Pan Closet Container, and make the necessary connection with the inlet and outlet pipes. It will deliver two gallons at each action, or more or less (if required) which can be determined by means of the Regulating Screw, and it gives sufficient water before it closes, after letting go the handle, to trap the Pan.

¾-in.	each	£0	18 0
1-in.	„	1	5 0
1¼ in.	„	1	7 0

EXTRA.

Iron Stands for fixing ... ... each 2/0



No. 133.—Tylor's Patent "Waste-not" Valve, on Pedestal (Fig. ³³).

With 1-inch valve and brass sunk dish each £1 6 6

EXTRA.

With 1¼-inch valve, if cistern is less than 10-ft. above closet ... each 2/6

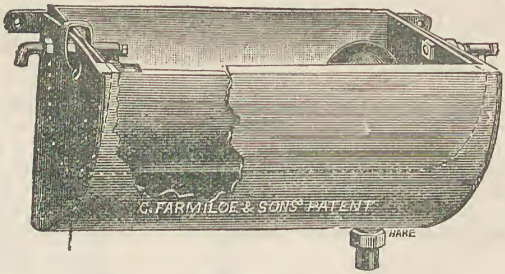
Without handle 3/6 less.

No. 133a.—New River Pattern.

EXTRA.

1-in. Valve	each	2/0
1¼-in Valve	„	3/6

WASTE PREVENTING CISTERNS.



No. 135.—George Farmiloe & Sons' Patent Tip-up Waste-Preventing Cistern.

Gives a full flush and after-flush without the aid of a syphon.

Suitable for either pan, valve, hopper, or wash-out closets

IN CAST IRON, PAINTED.

			2 Gallon
No. 1.	With warning pipe	each	£0 18 0
,, 2.	With brass overflow to connect to lead pipe	,,	1 1 0

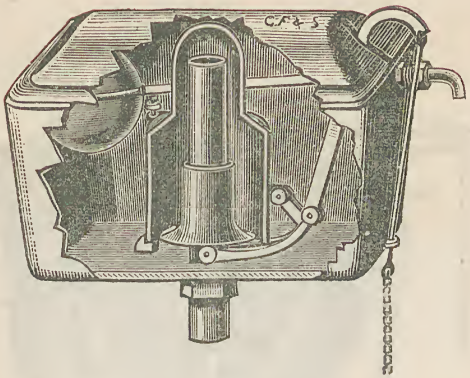
IN GALVANIZED WROUGHT IRON.

			2 Gallon.	3 Gallon.
No. 3.	With warning pipe ...	each	£1 0 0	1 3 0
,, 4.	With brass overflow, to connect to lead pipe	,,	1 3 0	1 6 0

No. 135a.—George Farmiloe & Sons' Tip-up Flushing Cistern.

This is similar to the above, but the supply is not shut off when the handle is pulled, so that it is not a Waste-Preventing Cistern.

In Cast Iron, painted, 2 gallon ... each 14/0



No. 135b.—George Farmiloe & Sons' "Wave" Syphon Cistern.

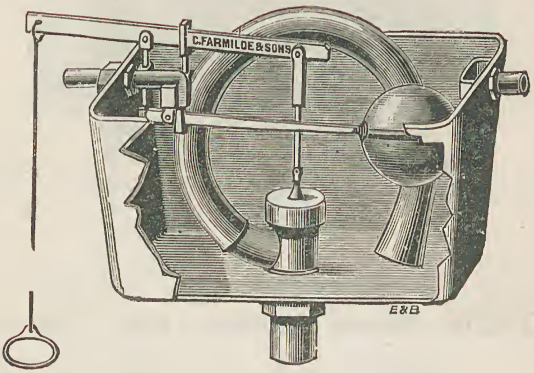
One of the leading features of this cistern is that the full volume and power of specified flush is obtained, whether the handle is held down during the discharge, or released immediately.

It cannot be half charged or made to run continuously.

The main cylinder or bell of syphon is a fixture, and a heavy counterweight is not required; there are no valves to leak or close fitting moving parts to get out of order, and all details are of the most substantial and durable description.

It weighs less, occupies less vertical height (*i.e.*, the bottom of cistern can be fixed nearer to ceiling), has a shorter pull (2 inches), and is smaller and generally more compact and neater in appearance than any other cistern of corresponding class and capacity.

In cast-iron, painted, 2 gallon ... ... each 20/0



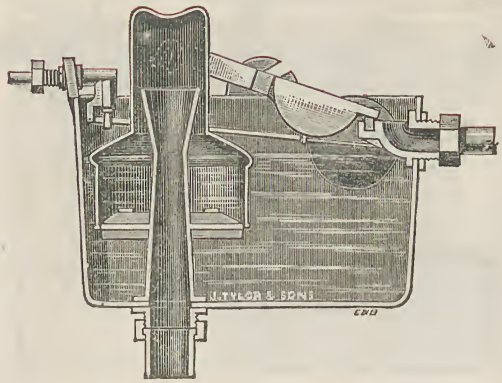
No. 135c.—GEORGE FARMILOE & SONS' Syphon Cistern, with drawn lead syphon. The syphon is made in the same way as the drawn traps shown on page 102.

In cast-iron, painted, 2 gallons ... ...each 20/0

No. 135d.—GEORGE FARMILOE & SONS' Wood Cistern, lined with lead, and with drawn lead syphon, as above.

Two-Gallon ... ...each 20/0

Three-Gallon ... ... ,, 24/0

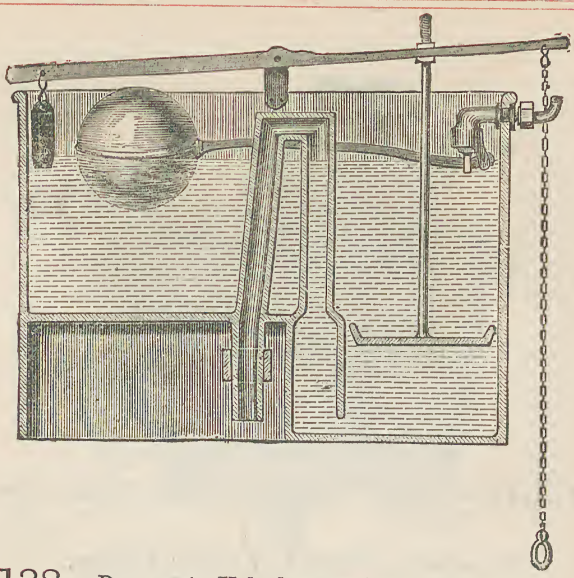


No. 137.—Bean's Patent Valveless Waste-Preventing Cistern.

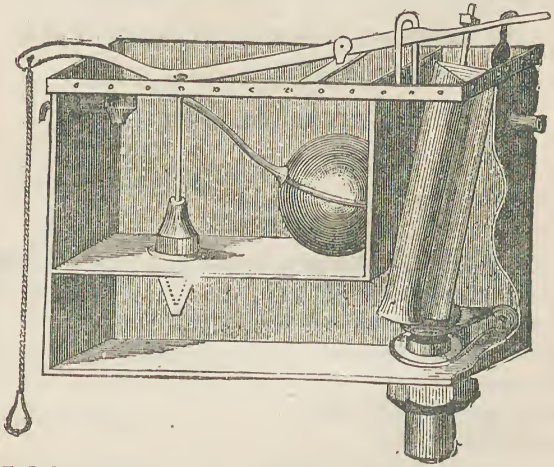
Two-Gallon Painted Cast-iron Cistern, with Copper Dome ½ in. High-Pressure Ball Valve, warning pipe connection, and 1½ in. brass outlet connection, with cap and lining ...	£1	10	0
Ditto, ditto, Galvanized...	1	14	6
Three-Gallon, ditto, ditto, Painted ...	1	12	6
Ditto, ditto, Galvanized...	1	17	6

EXTRAS.

If fitted with Ball Valve for pressures under 6 ft.	£0	2	6
Ditto, for low pressures under 2 ft.	0	4	6
If with lever bearings, bushed with Gun Metal	0	5	0
Stamped by New River Company	0	2	0
Brass chain and ring	0	2	0
Brass chain and ebony pull handle			
Ditto, earthenware handle			
Cover for Two-Gallon Cistern, Painted	0	3	6
Galvanized	0	5	0
Cover for Three-Gallon Cistern, Painted	0	4	0
Galvanized	0	5	9

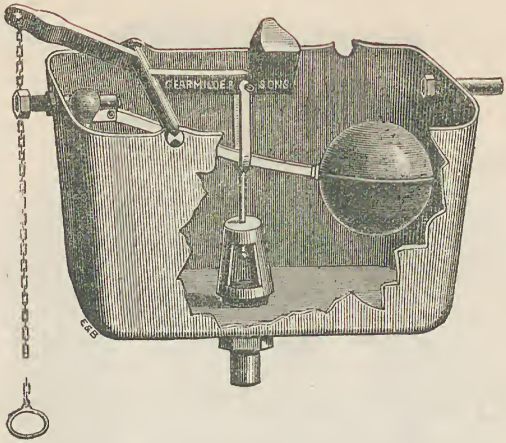


No. 138.—Brazier's Valveless Syphon Water-waste Preventer Cistern ... ... each 18/6

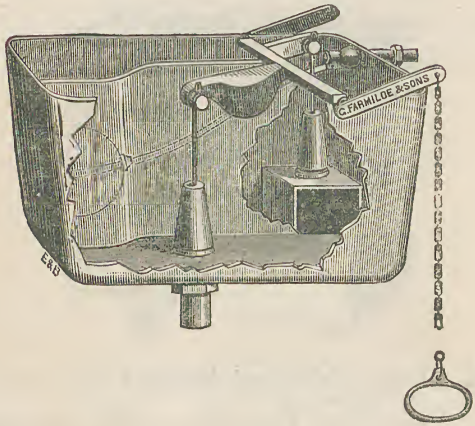


No. 139.—Brazier's Improved Double-Chamber Syphon Water-waste Preventer Cistern, with Silent Supply.

With double chamber ... ... each 25/0
„ single „ ... ... „ 18/6

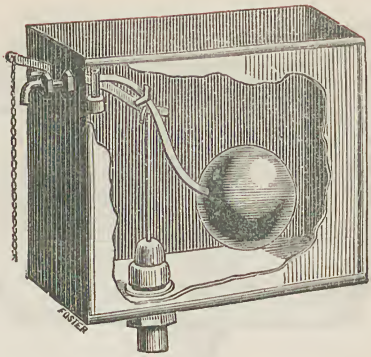


No. 140.—Cheap Single Valve Cast Iron Waste Preventing Cistern (reversible), for wash-out or hopper closets ... ... each 12/6

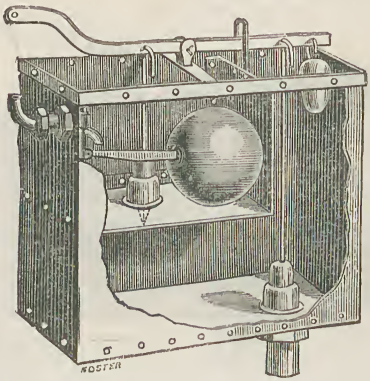


No. 141.—Cheap Double Valve Cast Iron Waste Preventing Cistern, for wash-out or hopper closets ... ... each 15/6

No. 142.—Ditto, with After-Flush, for valve or pan closets ... ... each 18/6



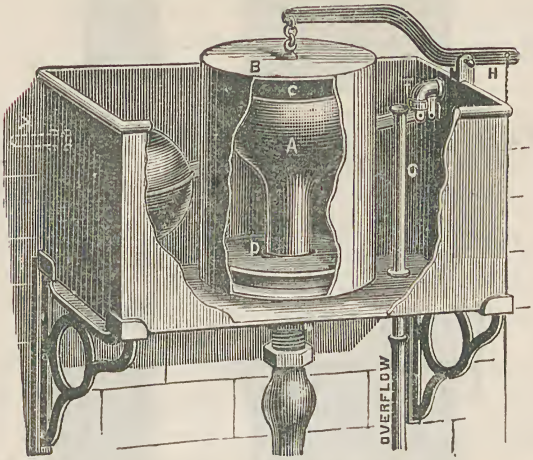
No. 143.—Cheap Galvanized Wrought Iron Single Valve Waste Preventing Cistern (for wash-out or hopper closets) ... ... each 6/6



No. 144.—Cheap Galvanized Wrought Iron Double Valve Waste Preventing Cistern (for wash-out or hopper closets) ... ... each 7/6

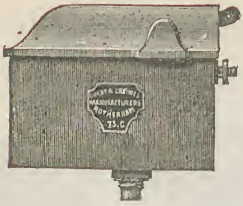
No. 145.—Ditto, with After-Flush (for valve or pan closets) ... ... each 11/6

No. 146.—Croydon Waste Preventing Cistern (old pattern), each 21/0
Ditto (new pattern) ... ... ,, 13/6
Ditto, with trapping box (old pattern) ... ... ,, 25/0



No. 147.—Doulton's Patent "Vacuum" Waste Preventing Cistern.

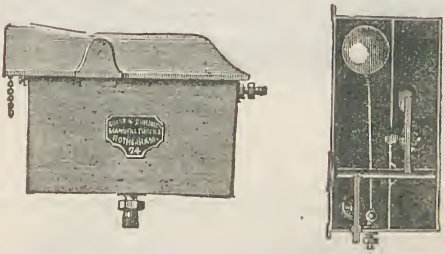
No. 59X.—Ditto Water Waste Preventer, as described	£0	17	6
No. 59XB.—Ditto, but with copper cylinder...	0	19	6
Either of the above to discharge 3 gallons, *extra*	0	4	0
No. 59G.—Ditto, but with galvanized cast iron shell, galvanized iron cylinder and copper ball ...	1	1	0
No. 59GB.—Ditto, but with copper cylinder...	1	3	0
Either of the above to discharge 3 gallons, *extra*	0	5	0
No. 59A	0	19	6
No. 59B	1	1	0
No. 59E	1	4	0
Covers for cast iron, painted	0	1	9
Ditto do. galvanized	0	2	6
No. 59S	1	9	0
No. 108	0	15	0
No. 91.—Seat action apparatus, comprising cast iron vacuum cistern, back weight levers, standards, and 6-ft. connecting rod	1	11	6
Do. do. all ironwork galvanized ...	1	17	6
¾-in. ball valves to either of the above, *extra*	0	2	0



No. 148.—Guest & Chrimes' Waste Preventing Cistern (73c), (single valve for hopper closets) ... ... each 17/6

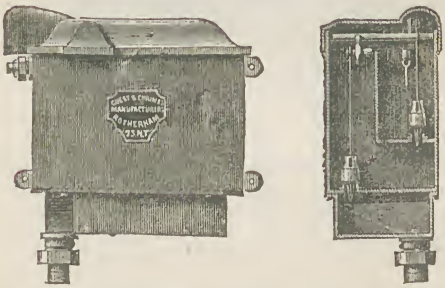
Ditto, with union on outlet ... ... „ 19/6

Covers, 2/6 each; Overflows, 8d. each.



No. 149.—Guest & Chrimes' Waste Preventing Cistern (74), (double valve for hopper closets) ... ... each 22/0

Covers, 2/6 each; Overflows, 8d. each.



No. 150.—Guest & Chrimes' Waste Preventing Cistern (73NT), (double valve, with after-flush, for valve or pan closets) ... ... each 30/0

Covers, 3/6 each; Overflows, 8d. each.

No. 151.—Guest & Chrimes' Double Valve Cistern was brought out to meet cases where the question of price was the chief consideration; it is, however, a perfect preventer of waste, and delivers about 2 gallons of water at each flush. (74 C.)

Including cover and plain ferrule overflow, and 1¼-inch brass union outlet, with pull handle and chain. Right or left hand ... each 21/6

If with trapping box, which holds back a part of the 2 gallons for trapping the basin of pan closet ... ... each 26/6

No. 152.—Guest & Chrimes' Double Valve Cistern, of larger dimensions, delivers about 2½ gallons at each flush, has lead weighted valves lined with brass, and bearings bushed with brass. (74 L.)

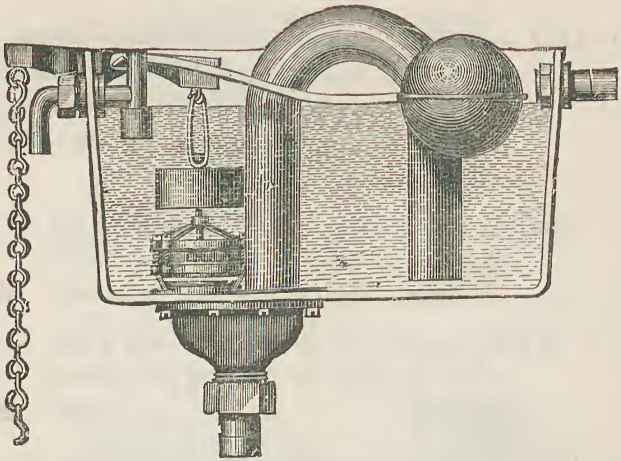
Including Cover, 1-inch plain ferrule overflow, 1¼-inch brass union outlet, and pull handle and chain ... ... each 28/0

No. 153.—Guest & Chrimes' Double Valve Cistern, large and strong, made with lugs cast on for fixing to wall, and delivers about 2½ gallons at each flush. (74 N.)

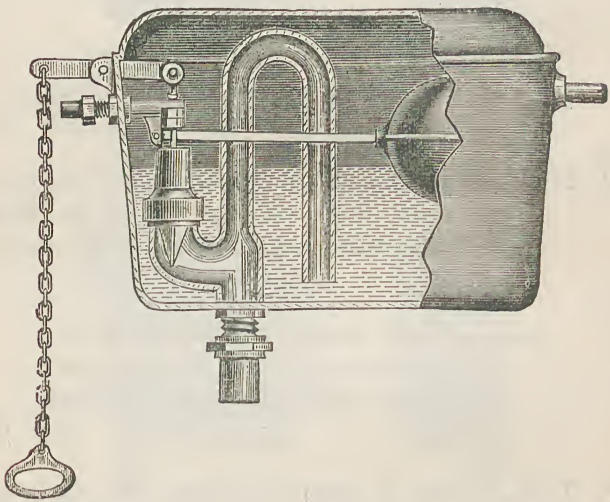
Including cover, ¾-inch union ferrule overflow, 1¼-inch brass union outlet, and turned wood pull handle and chain. Right or left hand each 36/0

No. 154.—Guest & Chrimes' Cistern, with cast iron fall pipe and elbow for basin, all connected ready for fixing. (74 N.)

Each 40/0.

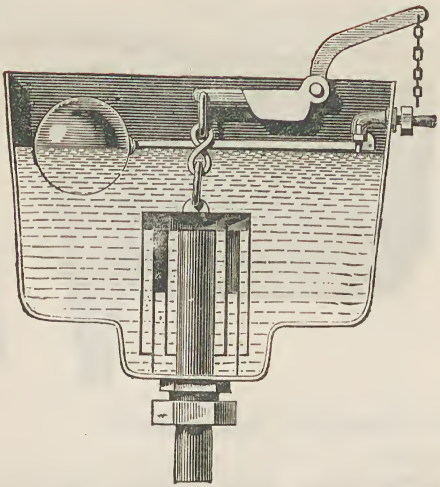


No. 155.—LAMBERT'S Patent Syphon Waste Preventing Cistern, in cast-iron ... each 25/0
Iron cover 2/6



No. 155a.—Cheap Cast-iron Syphon Cistern.
With cover ... ... each 13/6

No. 155b.—Ditto, in galvanized wrought-iron, without cover ... ... each 11/0

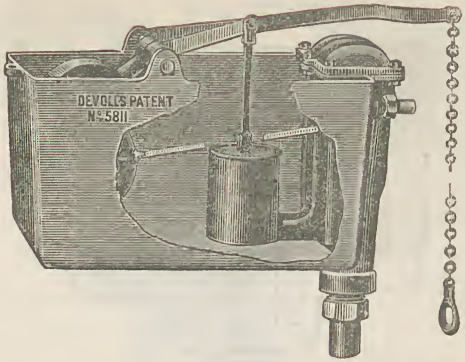


No. 155b.—HUMPHERSON'S Improved Syphon Waste-Preventing Cistern.

POSSESSES THE FOLLOWING ADVANTAGES:—

Great Flushing Power, combined with Simplicity of Construction.
A Full 1½ in. Water Way in every part.
No Valves (except Ball Valves) to get out of order.
No Tight Fitting Parts, Leathers or Rubbers.
The Flushing Power maintained to the last.
A Full Flush ensured whether lever is held or not.
Specially adapted where low head of water only can be obtained, Flushing well at height of only 2-ft.
Adapted for all descriptions of closets or urinals.
No Waste by holding down the lever.

		£		
Cast-iron painted cistern, to discharge 2 gallons	each	£1	0	0
Cast-iron galvanized, with copper cylinder	,,	1	10	0
Japanned zinc (14 gauge)	,,	1	4	0
Cast-iron painted, to discharge 3 gallons	,,	1	5	0
Cast-iron galvanized, with copper cylinder	,,	1	15	0
Handsome brass chain and pull	,,	0	4	0
Ditto. ditto. extra strong	,,	0	5	0
Galvanized iron chain and brass stirrup pull	,,	0	1	3
Cast-iron brackets	per pair	0	1	3
Ditto ditto galvanized	,,	0	1	6



No. 156.—De Voll's Syphon Cistern.

Advantages:—

It is a **perfect** Water Waste Preventer. The Syphon being double cannot be partially charged or made to run continuously, and cannot be tampered with in any way whatever.

There are no holes for connections whatever in the bottom of this Cistern, and no joints except what are out of the water, therefore there can be no damage to property from leakage of joints.

The lever action is balanced, and the cistern is noiseless throughout its action.

The cistern is fitted with a strong substantial ball tap of the most approved principle.

The cistern is so designed that the connection for the fall pipe, and the connection for the ball tap are readily accessible.

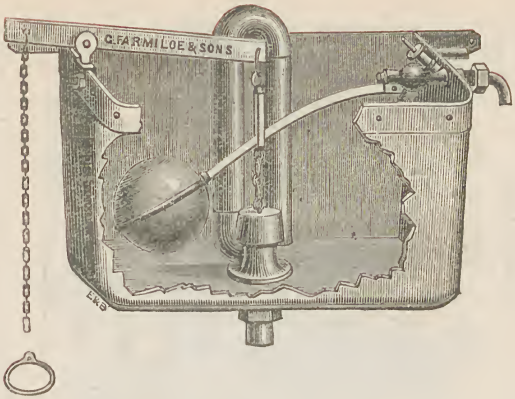
It is impossible for any sewer gas to escape into the house through the Cistern Pipes as the Vertical Pipes inside the Cistern are always full of water and act as a perfect trap.

The action is as follows:—When the lever is pulled down the water is forced out of the cylinder into the charging pipe, this water falling in the centre of the two syphons draws off the air and instantly charges them, when both of the syphons deliver the water into one fall pipe giving a flush of much greater force, than can be obtained with a single syphon, with the advantage of more effectually cleansing the closet.

PRICES.

	1 Gal.	2 Gals.	2½ Gals.	3 Gals.
Size of Outlet Pipe required ...	1-in.	1¼-in.	1¼-in.	1¼-in.
Painted with best Oxide Paint	20/0	20/0	23/0	25/0
Galvanized	28/0	28/0	31/0	33/0
Strong Cast Iron Brackets for fixing to wall ... ... *extra*	1/6	1/6	2/0	2/6
Brass Chain and Brass Pull ... *extra*	1/0	1/0	1/0	1/0
Brass Chain & Ebony or China Pull, *extra*	2/0	2/0	2/0	2/0
Copper Cylinder ... ... *extra*		2/3		

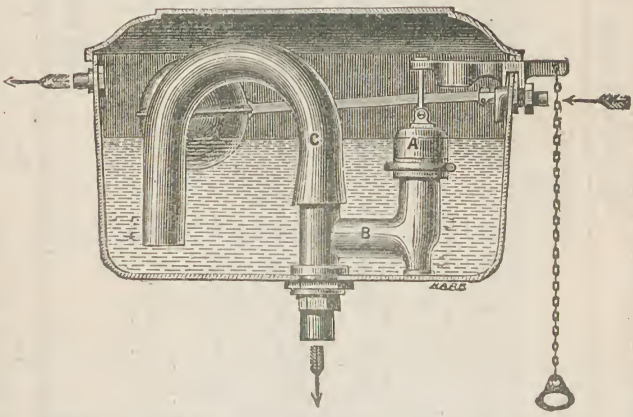
The 2 gallon Cistern is made with 1½-in. outlet pipe, when so ordered. 1/6 extra.



No. 157.—OSBORNE'S Patent Syphon Waste Preventing Cistern.

Fitted with Osborne's patent Regulating Ball Valve, which can be adjusted to suit any pressure, and can be repaired without shutting off the water.

In galvanized wrought iron ... ... each £1 5 0



No. 158.—PURNELL'S Patent Syphon Waste Preventing Cistern.

No. 1.	18-in. by 9-in. by 10-in. single flush,	each	£1	5 0
,, 2.	18-in. ,, 9-in. ,, 12-in.	,,	1	7 6
,, 3.	18-in. ,, 11-in. ,, 12-in.	,,	1	15 0

EXTRA.

Galvanized Chain and Ring ... ... each 1 6

No. 160.—Smith's Registered Waste Preventing Cisterns, in wood, lined with sheet lead or copper. All working parts brass bushed.

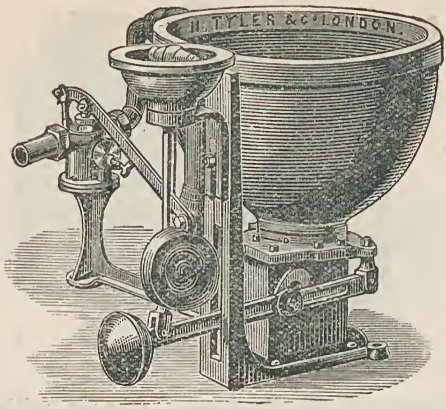
No.	DESCRIPTION.	In Sheet Lead.			In Copper.
		4-lb.	5-lb.	6-lb.	1-lb.
A1	Double-Valve Cistern, to discharge 1½ gallons at one pull	19/9	21/0	22/3	22/3
A2	Double-Valve Cistern, similar to A1 except in size, to discharge 2 gallons at one pull	20/6	21/9	23/0	23/0
B2	Double-Valve Cistern, to discharge 2 gallons at one pull	19/9	21/0	22/3	—
B3	Double-Valve Cistern, similar to B2 except in size, to discharge 2½ gallons at one pull	20/6	21/9	23/0	—
C2	Single-Valve Cistern, to discharge 2 gallons at one pull	13/9	14/6	15/6	15/6
C3	Single-Valve Cistern, similar to C2 except in size, to discharge 2½ gallons at one pull	14/6	15/3	16/3	16/3
C4	Single-Valve Cistern, to discharge 2 gallons at one pull	15/0	15/9	16/9	16/9
C5	Single-Valve Cistern, similar to C4 except in size, to discharge 2½ gallons	15/9	16/6	17/6	17/6
D1	Double-Valve Cistern, with Service Box, to discharge 2 gallons at one pull, and an additional ½ gallon for after-flush. Suitable for Pan Closets...	26/0	28/0	30/0	30/0
D2	Double-Valve Cistern, with Service Box, to discharge 2 gallons at one pull, and an additional gallon for after-flush. Suitable for Sanitary Closets	27/3	29/6	31/6	31/6
E2	Double-Valve Cistern, to discharge 2 gallons at one pull, with a reserve of 3 flushes...	26/0	28/0	30/0	30/0
F1	Double-Valve Cistern, to discharge 2 gallons at one pull, with a reserve of 2 flushes...	24/0	26/0	28/0	28/0

EXTRAS.

No. S2. 1¼-inch Brass Syphon, can be fitted to any Cistern, except D1 and D2 ... ... 5/0
No. S2. 2 ,, ,, ,, ,, ,, ,, ... 6/6

If supplied with Lids, 1/0 extra. Any of the above Cisterns can be made in Larger Sizes if required.

All the above can be had with Brass Air Pipe through the large weight at same price, except C2 and C3.



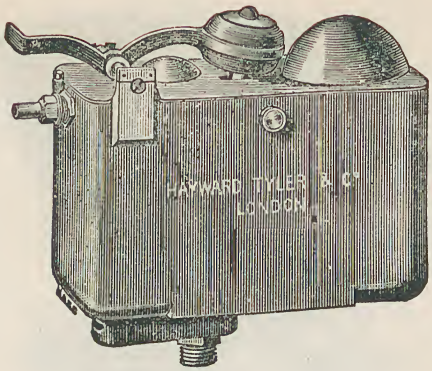
No. 160a.—HAYWARD TYLER & Co's Elastic Valve Closets, with Howard's Improved Equilibrium After-flush Regulator.

With 1-in. regulating valve—

Extra quality with ornamental earthenware basin, bottom valve dish and handle to match, lead box and arm, extra strong bright brass fittings and supply pipe to trap	£4 4 0
Best quality with ornamental earthenware basin, large bright brass dish and glass handle, lead box and arm, bright brass fittings, and supply pipe to trap	3 16 0
Special quality with white, blue, or ornamental basin, bright brass dish, and glass or opal handle ...	2 15 0

NOTE.—The "extra" and "best" qualities are now made with *4-in. bottom valves*, giving a clear outlet of over 12 square inches.

Extra 5/0



HOWARD'S Patent Waste Preventing Cistern, with cover and union on outlet, and with patent admission valve, by means of which the water is shut off when the handle is pulled.

No. 160b.—As a "Syphon" Cistern... ...each 19/0

No. 160c. ,, ,, ,, for low pressure ... ... each 20/0

No. 160d.—As an "Afterflush" Cistern, for valve or pan closet, with trapping box ... ...each 20/0

No. 160e.—HOWARD'S Patent Cistern, without trapping box ... ...each 16/0

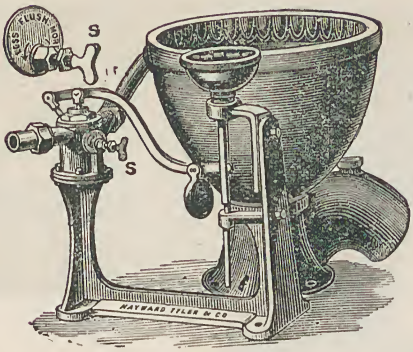
Ditto, without cover 14/6

No. 160g.—HOWARD'S Patent Cast Iron 1 Gallon Syphon Cistern, for urinals, &c.

Each 16/0

No. 160h.—HOWARD'S Patent Self-acting Periodic Syphon Flushing Cistern, for urinals, &c.

Each 15/0



No. 160j.—Hayward Tyler & Co.'s Full Flush Valveless Closet, with Howard's equilibrium after-flush regulating valve fixed under seat. For attaching direct to high pressure mains. Regulated by screw S.

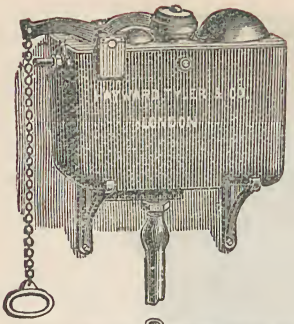
With "blue dragon" basin, large sunk dish, and glass handle 40/0

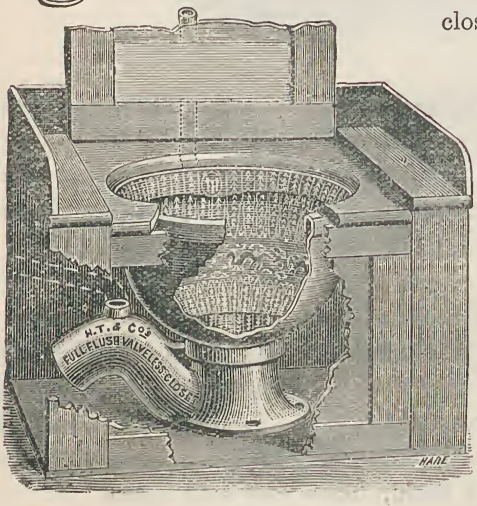
If dish is silver-plated 5/0

With white basin, brass dish and glass handle... ... ... 38/0

With white basin, galvanized iron dish and handle, a most useful closet for institutions, hospitals, &c., being very clean and not liable to choke or get out of order... ... ... 33/6

A similar arrangement can be supplied with "washout" and other basins.





No. 160k.

HAYWARD TYLER & Co.'s Full-Flush Valveless Closet, with patent syphon cistern. An improved adaptatior of the full-flush valveless closet.

This arrangement supplies the demand for a satisfactory sanitary closet, of handsome appearance and moderate price, working by "bell-pull" arrangement without any apparatus below the seat. It will be found to prevent all smell and sewer gas. The flushing action is immediate and complete, leaving the basin perfectly clean.

Complete as above, with P or S trap, "blue dragon" basin, brass chain and ring or handle ... ...each 30/0

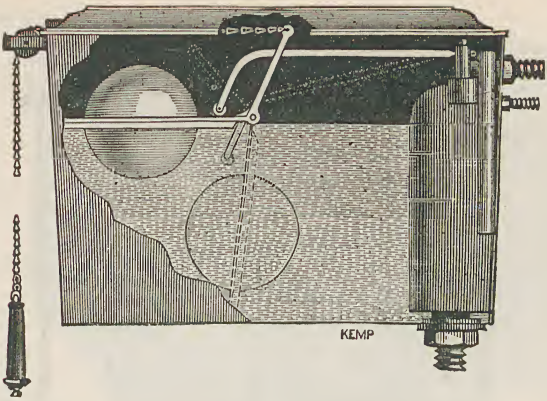
With white basin, galvanized iron chain and ring 32/0

The same closet and cistern can be supplied with sunk dish and handle, on adjustable bracket, for fixing in seat of closet. With this arrangement the appearance is as ornamental as the best valve closet.

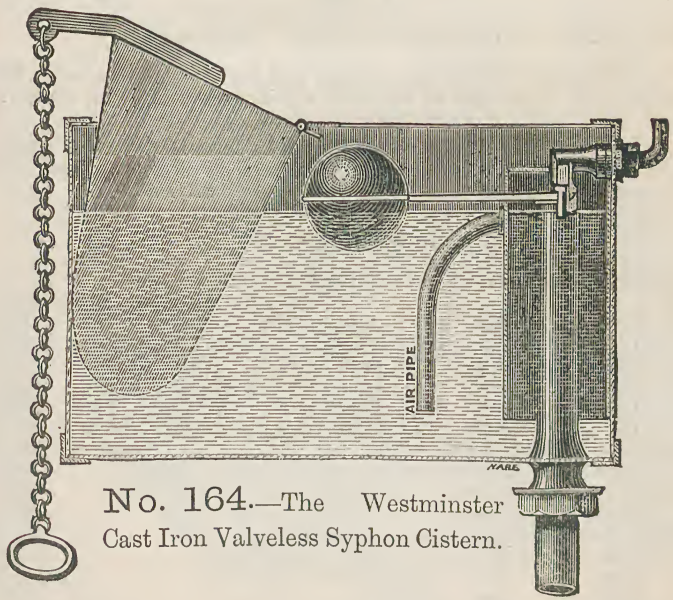
With "blue dragon" basin, large brass sunk dish, and glass handle, or earthenware dish to match basin, each 45/0

With white basin, brass, or white earthenware dish and handle ... ...each 42/0

If with connection for ventilator at V (needful where several closets are on the samk soil pipe) ... extra 1/6



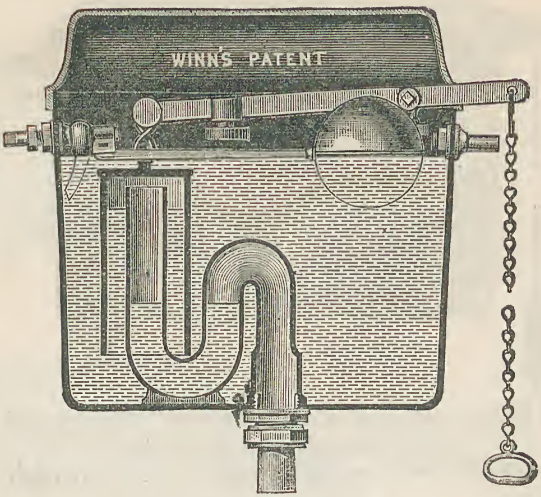
No. 162a.—FARMILOE'S "Universal" Cistern and Valveless Water Waste-Preventer.
In cast iron, with copper fittings ... ... each 19/6



No. 164.—The Westminster Cast Iron Valveless Syphon Cistern.

	2 Gallon.	3 Gallon.	4 Gallon.
With copper fittings ... each	22/6	26/6	31/0
,, galvanized iron fittings ,,	20/0	23/0	26/0

With overflow, 1/0 extra.



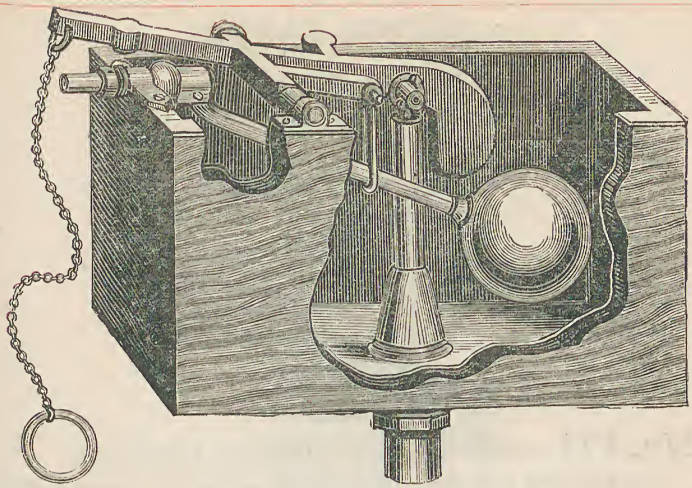
No. 165.—Winn's Patent "Acme" Syphon Cistern.

By pulling the lever the cap is raised and the syphon is charged. The lever may now be released, as the water continues to run till the cistern is empty, the velocity of the flush increasing to the end of the discharge.

Any given quantity of water—usually two gallons—is used at each flush, neither more nor less, thus economising and preventing waste of water, and, at the same time, ensuring an efficient flushing of the closet.

PRICES.

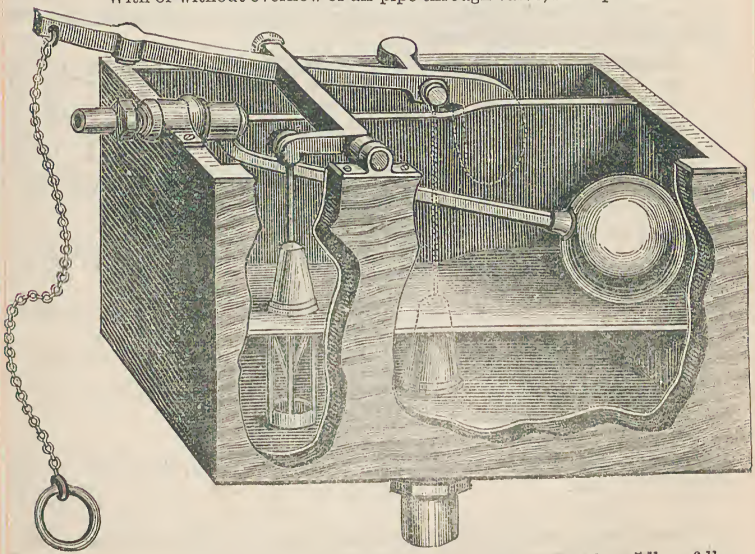
In strong cast-iron, painted, with galvanized chain and handle,			1 gal.	20/0 ; if all galvd.	28/0
Ditto	ditto	ditto	1½ ,,	20/0	ditto 28/0
Ditto	ditto	ditto	2 gals.	20/0	ditto 28/0
Ditto	ditto	ditto	2½ ,,	23/0	ditto 31/0
Ditto	ditto	ditto	3 ,,	23/0	ditto 31/0
Ditto	ditto	ditto	4 ,,	28/0	ditto 38/0
Ditto	ditto	ditto	5 ,,	33/0	ditto 45/0
In cast-lead, no cover, 2 gals. ... ...each					30/0
Ditto	3 ,, ... ,,				35/0
In sheet lead, in strong wood case, 2 gals. ... ... ,,					30/0
Ditto	ditto	3 ,, ... ,,			35/0
Brackets for fixing Cisterns ; in cast-iron, painted ... ... per pair					1/6
Ditto	ditto	ditto if galvanized ... ,,			2/6
Ditto	ditto	wrought-iron, painted ... ... ,,			2/0
Ditto	ditto	ditto galvanized ... ,,			3/0
If Cisterns have brass pull and porcelain handle ... ... *extra*					1/6
Ditto	plated chain and ebony handle... ... ... ,,				3/6
Ditto	syphon fittings for 1½-in. fall pipe ... ... ,,				2/6



No. 166.—George Farmiloe & Sons' Lead-Lined Waste-Preventing Cisterns. In strong dove-tailed wood cases, with taper sides and ends.

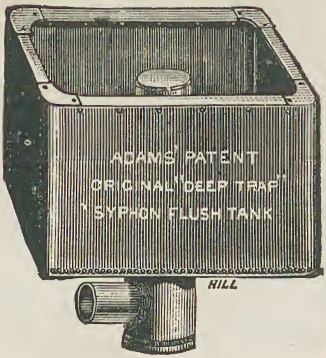
Single valve, 2 gall., 4-lb. 14/0, 5-lb. 15/0, 6-lb. 16/0
" 3 " 4-lb. 18/0, 5-lb. 20/0, 6-lb. 22/0

With or without overflow or air-pipe through valve, same prices.



		4-lb.	5-lb.	6-lb.
No. 167.—Double Valve, ditto, ...	2 gall.	19/0	20/0	22/0
No. 168.—Do. with after flush for valve or pan closets		26/0	27/6	29/0

FLUSH TANKS.



No. 171.—Galvanized Iron Automatic Flush Tank.

The flush tank here shown is admirably adapted for cleansing drains, which, for want of fall or other causes, are liable to choke and give off sewer gas, and for the intermittent supply of urinals, trough closet flushing, &c. It may be fed by a drop by drop supply from a small tap, or by any other convenient arrangement.

Upon the water gaining the starting level, about two inches above the top of the syphon, the discharge commences, without loss of liquid, effecting great economy in the water used.

15 gallons	...	each	£2	0	0	60 gallons	...	...	each	£6	10	0
20 ,,	...	,,	3	0	0	80 ,,	...	...	,,	7	10	0
30 ,,	...	,,	4	15	0	100 ,,	...	...	,,	7	15	0
40 ,,	...	,,	5	5	0	150 ,,	...	...	,,	10	15	0
50 ,,	...	,,	5	15	0	200 ,,	...	...	,,	13	0	0

A lighter cheap tank suitable for trough closet flushing is also supplied: 50-gallon, £4 10 0 each; 75-gallon, £5 10 0 each.

No. 172a.—Quick Charging Syphon, for sewer flushing.

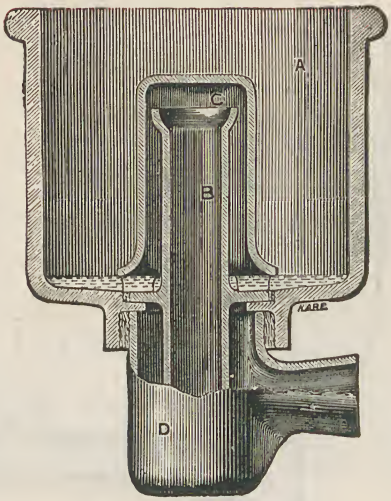
SIZE OF SYPHON OUTLET.	FOR FLUSHING A	CAST IRON.	
No. 1.— 4-in. ...	6-in. pipe...	£4 10 0 ...	6/0 per ft. extra depth of water.
,, 2.— 6¼-in...	9-in. ,, ...	6 10 0 ...	10/0 ,, ,,
,, 3.— 8-in. ...	12-in. ,, ...	8 10 0 ...	12/0 ,, ,,
,, 4.—10-in. ...	15-in. ,, ...	12 10 0 ...	16/0 ,, ,,
,, 5.—12-in. ...	18-in. ,, ...	14 10 0 ...	20/0 ,, ,,
,, 6.—15-in. ...	21-in. ,, ...	17 10 0 ...	22/6 ,, ,,

IN STONEWARE.

For flushing 6-in. pipe	... ...	each	£4	0	0
,, 9-in. ,,	... ...	,,	5	10	0
,, 12-in. ,,	... ...	,,	7	0	0

In every case, unless otherwise ordered, these syphons are made to draw off 3-ft. of water from tank, and can be supplied from stock.

Special Quotations for larger syphons, very short lengths, special patterns, &c.



DOULTON'S Patent Automatic Flush-Tank.

ADVANTAGES.—Simplicity of fixing; freedom from moving parts; facility of inspection; instantaneous action with "drop by drop" supply.

One of the most important points to be considered in the drainage of a house is the best means for keeping the drains constantly and efficiently flushed; without this accumulations are likely to form, impure gases are emitted, and the drains themselves eventually become choked.

By the use of Doulton's Patent Flush-Tank small discharges of water from baths, sinks, and rain water pipes—which would otherwise be powerless—are collected and automatically discharged with great flushing force, the merest dribble being sufficient to start the syphon. Where intended to discharge at fixed periods, such as for flushing urinal basins, or trough urinals and closets, clear water is used, and this is obtained through a small inlet tap, which may be adjusted so as to admit of the tank so discharging.

No. 173.—In Strong Salt-Glazed Stoneware, especially suitable for house purposes, as it is very strong and will not become coated (103).

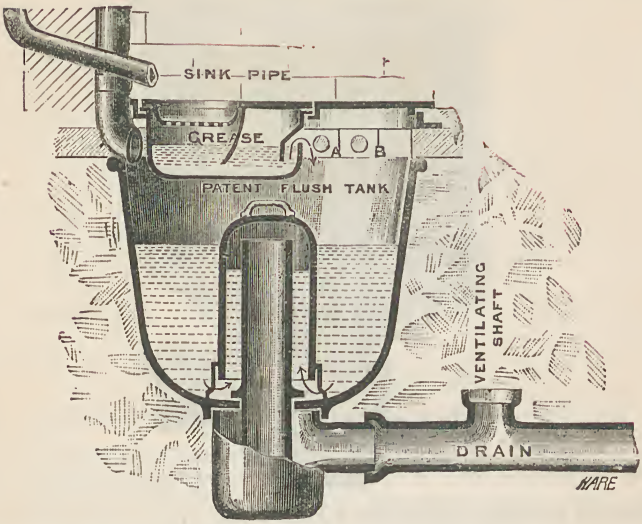
20 gallons ...	... each	£3	0	0	30 gallons ...	... each	£4	4	0

No. 174.—With Cast Iron Trap and Galvanized Iron Shell (104).

30 gallons ...	... each	£4	15	0	100 gallons ...	... each	£7	15	0
50 ,, ...	... ,,	5	15	0	150 ,, ...	... ,,	10	17	6
75 ,, ...	... ,,	6	17	6	200 ,, ...	... ,,	13	5	0

No. 175.—With Cast Iron Trap and Cast Iron Shell, coated with Dr. Angus Smiths' Solution (106).

14 gallons ...	... each	£1	10	0	50 gallons ...	... each	£4	0	0
30 ,, ...	... ,,	3	0	0	100 ,, ...	... ,,	6	0	0



No. 175a.—Patent "Combination" Grease Trap and Flushing Tank.

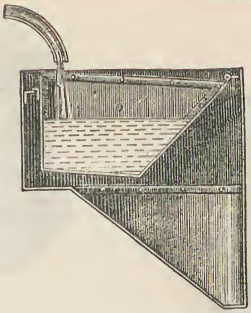
This tank is designed for use where grease, &c., is likely to enter and choke the drain. To check the grease, an interceptor is placed below the tank cover; this arrangement allows the water to pass through to the tank, whilst the grease accumulates in the interceptor to be cleaned out at regular intervals. Clean waste water may be led into the tank beneath the cover as shown at A and B.

Complete with tank, syphon, cover, sunk dish, and grease interceptor:—

	CAST IRON, COATED BLACK.	CAST IRON, GALVANIZED.	STONEWARE.
15 gall. ...	£3 5 6	£3 15 6	£3 5 0
30 ,, ...	5 0 0	6 0 0	5 15 6
50 ,, ...	6 0 0	7 0 0	—
100 ,, ...	8 0 0	9 0 0	—

Depth required, from 1-ft. 6-in. surface to sewer invert.

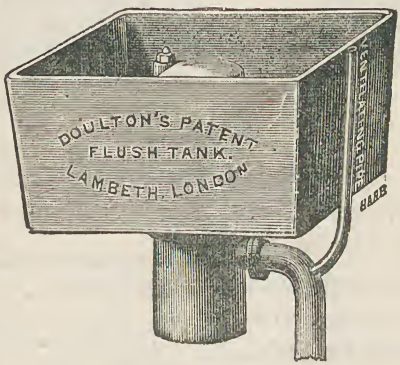
NOTE.—*All tanks sunk in the ground should be ventilated at the outlet as shown, otherwise pressure of air upon the outlet may in some degree affect the power of discharge.*



No. 176.—JORDAN'S Automatic Flushing Cistern, in galvanized wrought iron.

Jordan's Automatic Flushing Cistern consists of an iron box made to the shape shown in sketch, which can be of any required size, and is hung on pivots fixed in an iron casing. Its action is very simple, viz.: when the cistern is nearly full, the extra weight of water at one end causes it to tip up, thus giving a sudden and efficient flush to the closets or urinals; it then immediately rights itself and is ready to fill again.

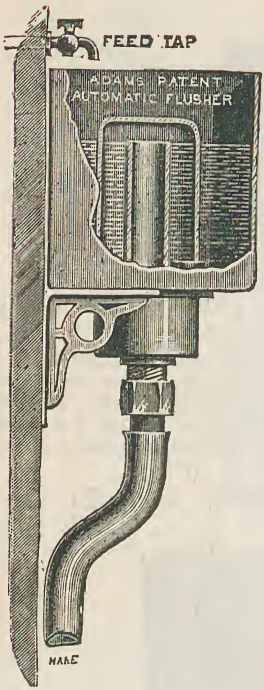
To give 1 gallon flush, with cover, complete, each £1 2 0
„ 2 „ „ „ „ 1 4 0



No. 176a.—DOULTON'S Galvanized Cast Iron Automatic Flush Tank to discharge 3 gallons (including regulating Valve) ... ... each £1 17 6

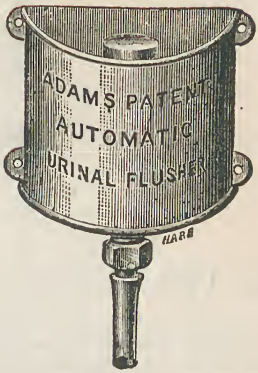
No. 176b.—Ditto ditto but to discharge 5 gallons ... ... each 2 10 0

The 3 and 5 gallon tanks are specially adapted for flushing ranges of urinal basins; in all cases the pipes must be ventilated as shown, and the horizontal pipe above basins should be turned up at ends and left open. Full particulars are attached to each tank.



No. 176c.—Patent Rectangular Galvanized Cast Iron Flushing Cistern, for the automatic flushing of urinals, closets, &c., with union on outlet for 1¼-in. pipe.

3 gallon ...each	£1	15	6
5 ,, ... ,,	2	7	6
10 ,, ... ,,	3	5	0
Cast iron brackets for do., per pair	0	3	6



No. 176d.—Patent Syphon Flusher for automatic flushing of urinals, &c.

The discharge of the entire contents of the cistern instantly takes place the moment the starting level is reached, thoroughly scouring the urinal, &c., to which it is connected. These flushers are fitted with 1½-in. brass unions at outlet.

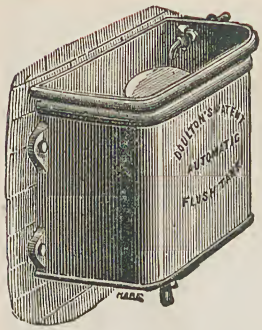
Angular for fixing in corners at same prices.

In galvanized wrought iron:

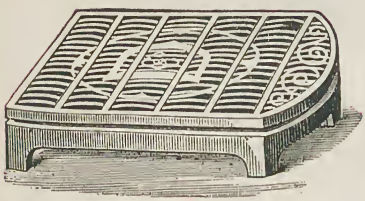
1 gall.	12/6	6 gall.	27/6
2 ,,	17/6	8 ,,	30/0
3 ,,	20/0	10 ,,	35/0
4 ,,	22/6	15 ,,	40/0

In copper:—

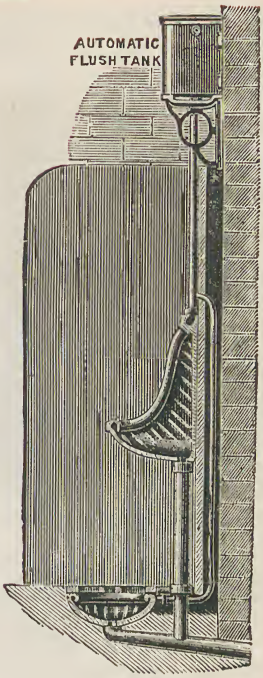
1 gall.	17/6	6 gall.	32/6
2 ,,	22/6	8 ,,	37/6
3 ,,	27/6	10 ,,	42/0
4 ,,	30/0	15 ,,	47/6



No. 176E.



No. 176J.



No. 176L.

No. 176e.—DOULTON'S Automatic Flush Tank in strong copper, to discharge 1 gall. (including regulating valve) ... ... each 17/6

No. 176f.—Angle do. do. ... ... ,, 17/6

No. 176g.—Ditto, in galvanized iron... ... ,, 15/0

No. 176h.—Angle do. do. ,, 15/0

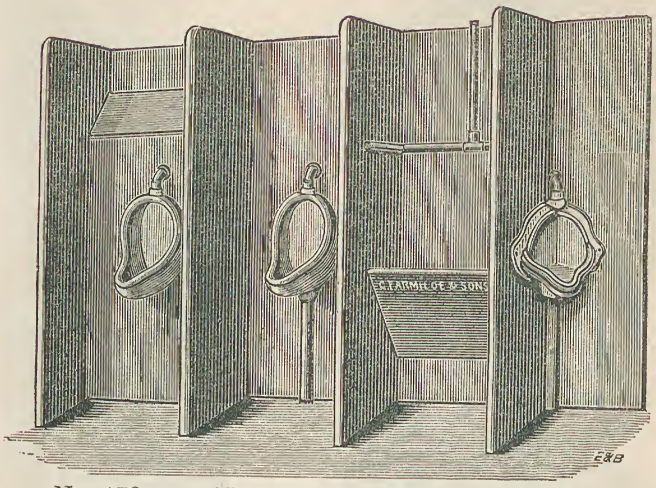
No. 176j.—Galvanized urinal treadle, 16 by 19, and high pressure valve... ... ... each 35/0

No. 176k.—Ditto with encaustic tile top ,, 37/6

No. 176l.—Comprising one gallon automatic flush-tank, copper pipe, union and socket, drip pan and grating, and brackets complete (exclusive of basin, down pipe and slate-work) ... ... per set 35/0

The tank, which flushes both basin and drip pan, may be regulated to discharge at any given period, and by this means the flushing arrangement is entirely independent of the user.

URINALS.



No. 178A. No. 178B. 178C. 178D.

No. 178a.—GEORGE FARMILOE & SONS' Flat-back Lipped Urinals, with slate backs and sides, backs 5-ft. by 2-ft., sides 5-ft. by 1-ft. 6-in., outlet at back and brass connection for supply.

For two or more persons ... per person £4 15 0

No. 178b.—Do. with outlet at bottom per person 4 5 0

No. 178c.—GEORGE FARMILOE & SONS' Slate Urinal with copper weeping pipe and slate apron, per person 4 15 0

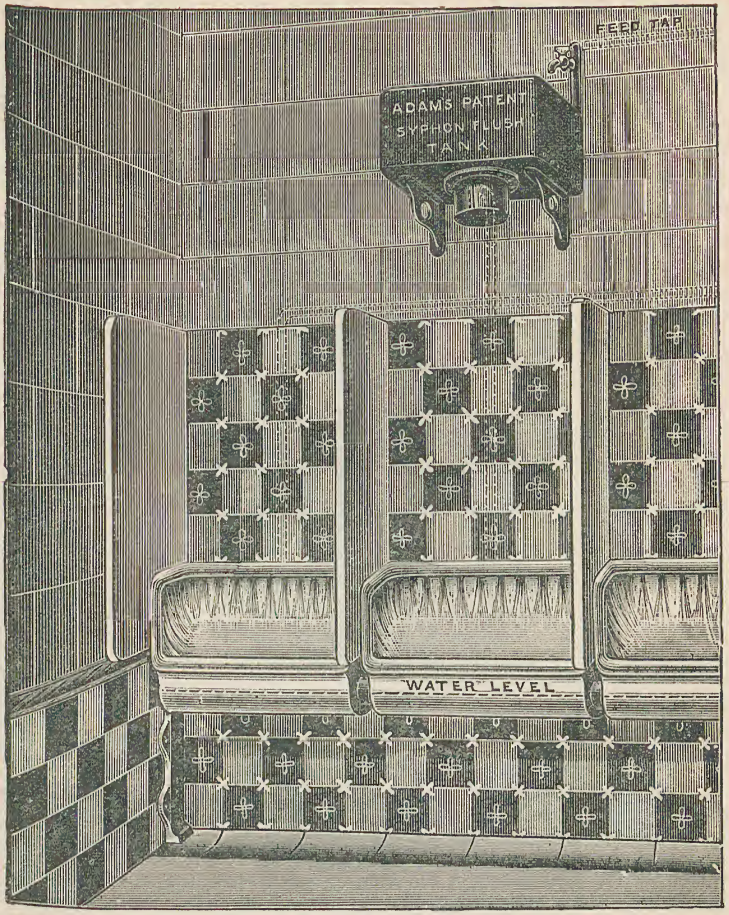
EXTRA.

Either of the above enamelled ... ... each	1	1	0
,, ,, in polished white vein marble ... ,,	1	1	0
,, ,, ,, St. Ann's marble ... ,,	1	15	0

No. 178d.—GEORGE FARMILOE & SONS' Angle Lipped Urinal, with slate sides 5-ft. by 1-ft. 6-in., outlet at bottom and brass connection for supply ... ... each 4 0 0

EXTRA.

If with enamelled slate sides ... ... each	0	17	6
,, polished white veined marble ... ... ,,	0	17	6
,, ,, St. Ann's ... ... ,,	1	10	0

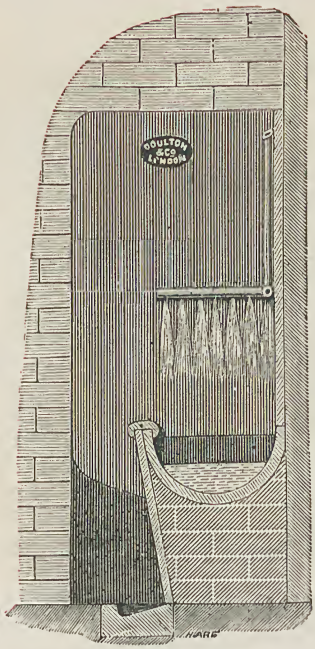


No. 178e.—Patent Flushing Urinal Range.

This urinal combines the advantages of the cradle urinal with the open trough. Each stall is fitted with an oblong cradle having a flushing rim at back and sides, these cradles are fixed side by side and connected by a 3-in. pipe at such a height that 3-in. of water is retained in the urinal, the whole are flushed automatically from a syphon tank, the discharge passing along the channel in the floor to the drain, the divisions are of slate, either plain or enamelled, or of white glazed stonework.

Cradle only in buff ware, white glazed inside each 40/0
,, salt glazed stoneware ... ... ,, 22/0

Complete ranges from £4 per stall, upwards



SECTION OF URINAL.

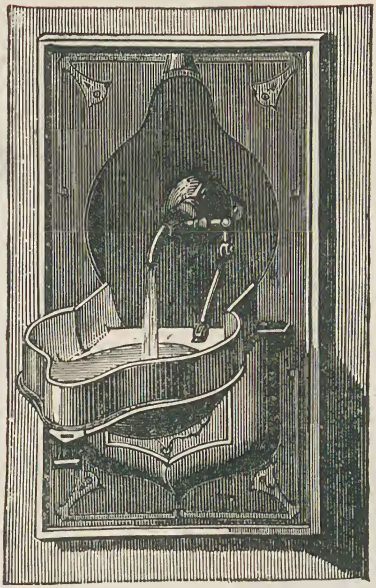
No. 179.—The Lambeth "Flush-down" Urinal, with Doulton's Patent Automatic Flush-Tank (100).

This Urinal is particularly adapted for public use, as it requires but little attention. The trough, capping, and gutter are made of strong salt-glazed stoneware, so that a perfectly smooth and impervious material is obtained, and thus the common defects in existing Urinals of coating and corrosion, which are the chief causes of the offensive smell, are entirely obviated.

At the outlet a weir is formed for the purpose of retaining sufficient water to dilute the urine, and at stated periods (regulated by the quantity of urine deposited) the whole is swept out by the discharge of the Automatic Flush Tank.

The Stoneware gutter is formed with a fall to the front, and may be kept clean by means of a constant small stream of fresh water. The backs and apron pieces are made of slate (plain or enamelled), and the latter are sloped inwards to allow room for the feet, and to permit of any drip falling direct into the gutter. The divisions are also of slate, and are raised 18 inches above the floor level, giving free passage for the atmosphere and great facilities for cleansing. Copper flushing pipes can be fixed where necessary for the purpose of occasionally washing down the slabs.

In plain slate without weeping pipes ... ... per person	£5	0	0
,, enamelled slate ,, ,, ,, any colour ... ,,	7	7	0



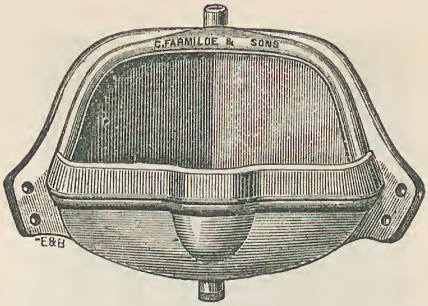
No. 180.—Smeaton & Schweikert's Patent Folding-up Urinal.

This durable and compact urinal, specially constructed for economy of space, supplies a long felt want for offices, dwellings, ships, and all other positions where saving of space is an object. It is fitted with a tap that is connected with the basin by a lever, so that when the basin is lowered for use the water is turned on, and is also shut off when the basin is folded up again. The whole of the interior is enamelled, insuring the utmost cleanliness, with complete convenience.

Dimensions, 24-in. by 14½-in.

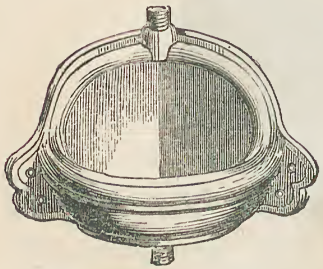
55/0 each.

Silver plated tap, each 3/6 extra.



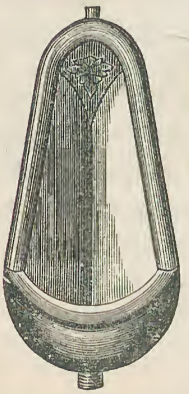
No. 181.—Angular Lipped Urinal.

	DEPTH.	WIDTH.	BACK TO FRONT.	WHITE.
No. 1.	13-ins.	18-ins.	20-ins.	19/6
,, 2.	11¾ ,,	16½ ,,	19 ,,	17/0
,, 3.	12¼ ,,	14 ,,	17½ ,,	14/0
,, 4.	10½ ,,	10 ,,	11½ ,,	10/0



No. 182.—Angular Bedford Urinal.

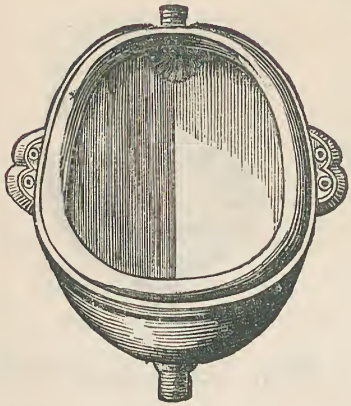
	DEPTH.	WIDTH.	WHITE.
No. 1.	12-ins.	17-ins.	13/0
,, 2.	10½ ,,	15 ,,	9/6
,, 3.	8½ ,,	13 ,,	6/6



No. 183.—Angular Cradle Urinal.

23-ins. high, 15-ins. wide ... each 12/6

For Enamelled Iron Urinals, see pages 216 to 218.



No. 184.—Large Angular Bedford Urinal.

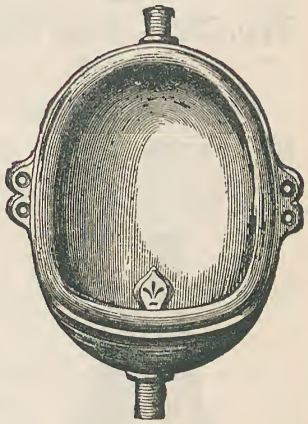
Height 22-ins., width 16-ins.

White ... ... each 13/0

No. 185. — Large Flat-back Bedford Urinal.

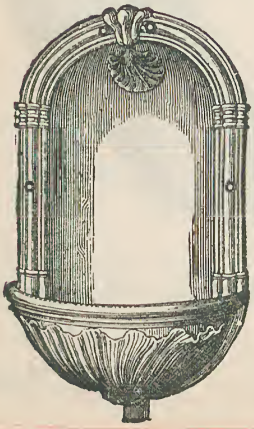
Height 22-ins., width 16-ins.

White ... ... each 13/0



No. 186.—Lipped Flat-Back Bedford Urinal.

	DEPTH.	WIDTH.	BACK TO FRONT.	WHITE.
No. 1.	17½	15½	14½	19/6
„ 2.	16	13½	13	17/0
„ 3.	10½	10	11½	12/0



No. 187.—Large Cradle Urinal.

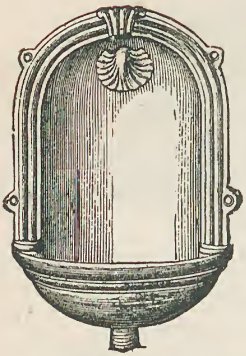
Shell and flow.

Height 26-in., width 15¼-in.

White ... ... each 13/0

No. 188.—Lipped Cradle Urinal.

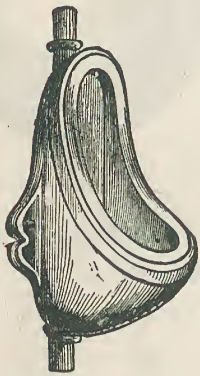
DEPTH.	WIDTH.	BACK TO FRONT.	WHITE.
21½	14	16	19/6
19½	12	13½	16/0



No. 189.—Cradle Urinal.
With shell.

Height 21-ins., width 13-ins.

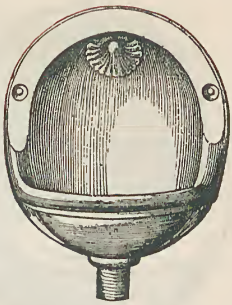
Cane and White... each 8/0
White ... ... „ 10/0



No. 190.—Bedford Urinal
With shell.

Height 20-ins., width 12-ins.

Cane and White... each 8/0
White... ... ... „ 10/0

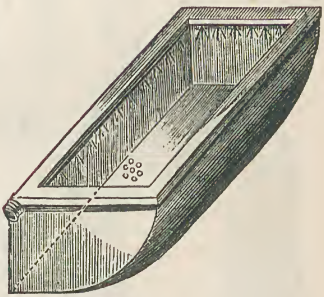


No. 191.—Small Cradle Urinal.

With shell.

Height 16-ins., width 12½-ins.

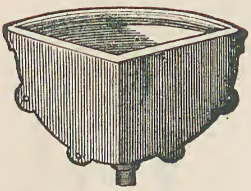
Cane and White ... each 6/6
White... ... ... „ 9/6



No. 192.—Oblong Urinal.

Length 22-ins., depth 7-ins.

White ... ... each 10/6

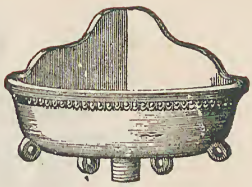


No. 193.—Angle Urinal.

Height 9-ins., width 18-ins.

Cane and White... each 6/0

White... ... ... „ 7/6



No. 194.—Angle Urinal. High back.

Height 14-ins., width 18-ins.

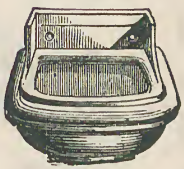
Cane and White... each 7/6

White... ... ... „ 9/0

No. 195.—Small Angle Urinal.

Height 10-ins., width 13-ins.

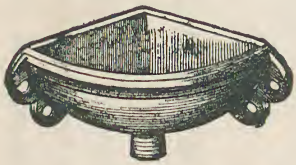
White... ... ... each 6/6



No. 196.—Small Urinal. Flat.

Height 10-ins., width 13-ins.

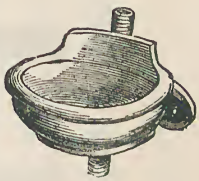
White... ... ... each 6/6



No. 197.—Small Angle Urinal.

Height 7½-ins., width 13-ins.

White... ... ... each 4/0

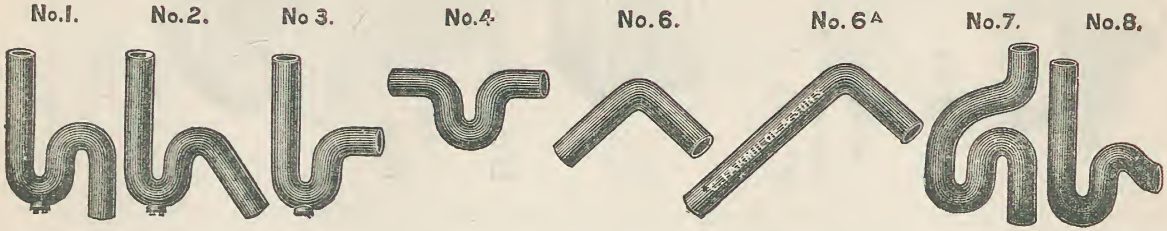


No. 198.—Small Urinal.

Height 10-ins., width 13-ins.

White... ... ... each 5/6

TRAPS.



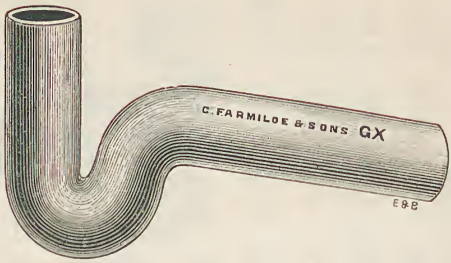
No. 202.

PATENT DRAWN LEAD TRAPS AND BENDS.

These Traps are far better than Cast Traps. There is not the slightest danger of "sand holes" or "air holes," as they are made by hydraulic machinery under very great pressure. They are perfectly smooth, and can be opened out without fear of cracking.

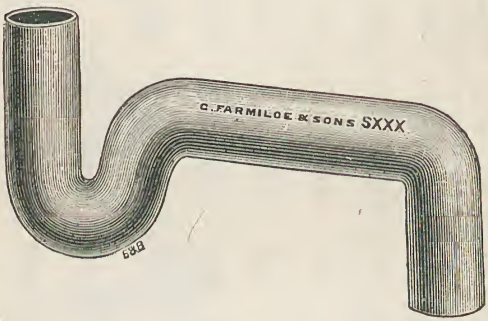
Fitted with Screw Caps.

	4½-lbs.	5-lbs.	6-lbs.	8-lbs.	6-lbs.	6-lbs.	8-lbs.	6-lbs.	8-lbs.	6-lbs.	8-lbs.
	1¼-in.	1½-in.	2-in.	2-in.	2½-in.	3-in.	3-in.	4-in.	4-in.	4½-in.	4½-in.
No. 1. S Shape ...each	2/3	3/0	4/0	4/6	5/2	6/3	8/0	8/0	9/6	9/6	11/9
„ 2. Half S ... „	2/3	3/0	4/0	4/6	5/2	6/3	8/0	8/0	9/6	9/6	11/9
„ 3. P Shape... „	2/2	2/8	3/4	3/10	4/3	5/0	6/3	6/3	7/9	7/9	9/3
„ 4. Running... „	2/2	2/8	3/4	3/10	4/3	5/0	6/3	6/3	7/9	7/9	9/3
„ 6. Bend ... „	1/0	1/4	2/0	2/6	2/9	3/4	4/3	5/3	5/9	6/3	7/3
„ 6A. Bend, with one end 21-ins. long } each	—	—	—	—	6/0	—	8/8	10/3	9/3	—	
„ 7. Bag Trap, each	2/6	3/6	4/9	5/9	6/6	7/3	9/9	12/3	14/9	14/9	17/6
„ 8. Emptage's Pattern, each	—	—	—	—	—	—	—	8/8	10/3	—	—



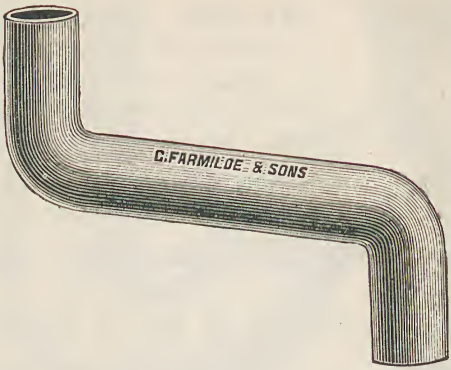
No. 202a.—George Farmiloe & Sons "Special" Drawn Lead Traps. Extra long.

Outside measure ...	26-in.	27-in.	28-in.	29-in.	30-in.	31-in.	32-in.
4-in., 6-lbs. .. ... each	10/3	10/6	10/9	11/0	11/3	11/6	12/0
4-in., 8-lbs. ... ... ,,	14/0	14/4	14/8	15/0	15/4	15/8	16/0
4½-in., 6-lbs.... ... ,,	12/8	13/0	13/4	13/8	14/0	14/4	15/0
4½-in., 8-lbs.... ... ,,	17/0	17/6	18/0	18/6	19/0	19/6	20/0



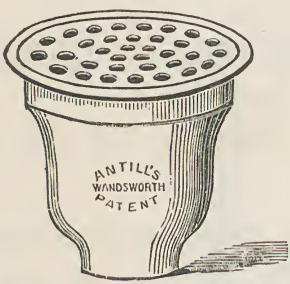
No. 202b.—George Farmiloe & Sons' "Special" Drawn Lead Traps and Bends, in one piece.

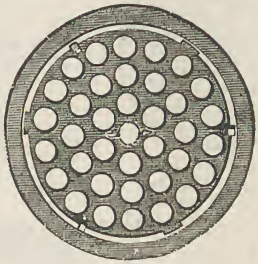
Outside measure..	28-in.	29-in.	30-in.	31-in.	32-in.	33-in.	34-in.	35-in.	36-in.
4-in., 6-lbs. each	12/6	12/9	13/0	13/3	13/6	14/0	14/6	15/0	15/6
4-in., 8-lbs. ,,	17/8	18/4	18/8	19/0	19/4	19/8	20/0	20/6	21/0
4½-in., 6-lbs. ,,	16/4	16/8	17/0	17/4	17/8	18/0	18/6	19/0	19/6
4½-in., 8-lbs. ,,	22/0	22/6	23/0	23/6	24/0	24/6	25/0	26/0	27/0



No. 202c.—GEORGE FARMILOE & SONS' Special Drawn Lead Offset. In one piece.

Outside measure	28-in.	29-in.	30-in.	31-in.	32-in.	33-in.	34-in.	35-in.	36-in.
4-in. 6-lbs.	10/9	11/	11/3	11/6	12/	12/6	13/	13/6	14/
4-in. 8-lbs.	14/8	15/	15/4	15/8	16/	16/6	17/	17/6	18/
4½-in. 6-lbs.	13/4	13/8	14/	14/4	15/	15/6	16/	16/6	17/
4½-in. 8-lbs.	18/	18/6	19/	19/6	20/	20/6	21/	21/6	22/



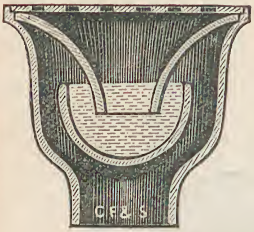


No. 203.—ANTILL'S Patent Stench Trap, with Lock, Grate, and Key.

This is superior to the ordinary Bell Trap, because it is a complete trap, whether the grating be on or off.

	IN LEAD.				
	2-in.	2½-in.	3-in.	3½-in.	4-in
Each	1/6	2/0	2/6	2/11	3/2

	IN IRON.				
	5-in.	6-in.	8-in.	10-in.	12-in.
Each	4/6	6/6	8/6	10/6	17/0



No. 204 —Self-Cleansing Bell-Trap in lead with brass bell and grate.

	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	5½-in.	6-in.
Each	2/0	2/6	3/0	3/6	4/6	6/0	7/6	10/0

No. 204a.—In galvanized iron.

	3-in.	3½-in.	4-in.	4½-in.	5-in.	6-in.	7-in.	8-in.	9-in.
Each	1/0	1/3	1/6	1/9	2/0	2/3	2/6	3/6	4/0

No. 205.—Lead Bell Traps. With Brass Grates.

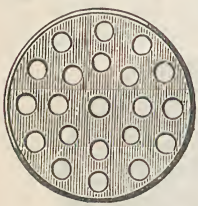
	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	5½-in.	6-in.
Each	1/3	1/5	1/9	2/2	2/7	3/6	4/0	5/0	6/0

With Hinged Brass Grates.

	3-in.	3½-in.	4-in.	4½-in.	5-in.
Each	2/2	2/8	3/3	4/0	5/6

No. 205a.—Iron Bell Traps.

	3-in.	4-in.	5-in.	6-in.	7-in.	8-in.	9-in.	10-in.
Round ... each	0/4	0/6	0/8	1/0	1/3	1/9	3/0	3/6
Square ... ,,	0/5	0/7	0/9	1/3	1/6	2/0	3/6	4/0



No. 206.—Brass Grates.

Cast, per dozen.

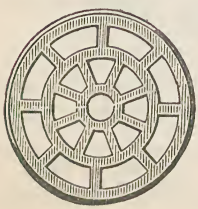
1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	5½-in.	6-in.
2/6	3/6	4/0	6/6	8/0	9/0	10/6	13/0	16/0	20/0

Stamped, per dozen.

1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½-in.
0/9	1/2	1/9	2/6	4/3	7/3	9/3

No. 207.—Brass Grates with rims.

	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.
Per doz.	14/0	15/0	18/0	20/0	22/0	28/0	32/0

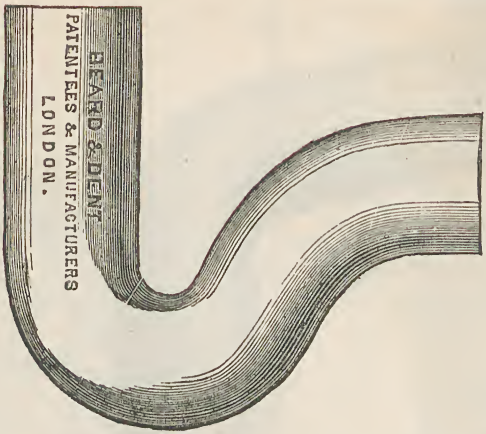


No. 207a.—Brass Cobweb Grates.

	2½-in.	3-in.	3½-in.	4-in.
Per dozen	9/0	9/9	12/0	13/6

No. 207b.—Brass Cobweb Grates, with rims.

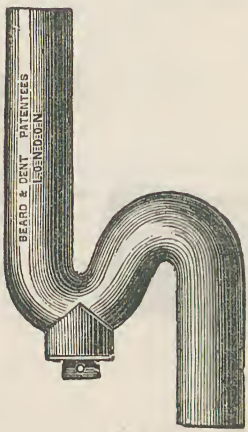
	3-in.	3½-in.	4-in.
Per dozen...	18/0	20/0	22/6



No. 208.—BEARD & DENT'S Lead Traps (P shape).

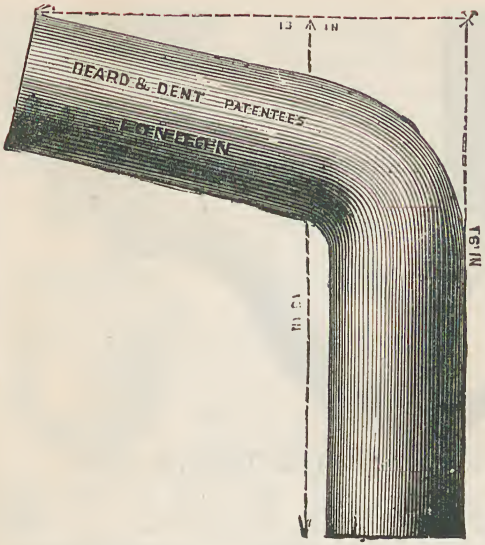
4-ins. Strong	... ...	each 7/9
4 „ Light	... ...	„ 6/3

	WITH SCREW CAPS.	WITHOUT SCREW CAPS.
2-ins.	each 3/6	... ... each 2/5
1½ „	„ 2/10	... ... „ 1/10



No. 209.—BEARD & DENT'S Lead Trap (S shape).

	WITH SCREW CAPS.	WITHOUT SCREW CAPS.
2-ins.	each 4/3	... ... each 3/2
1½ „	„ 3/2	... ... „ 2/2



No. 210.—

BEARD & DENT'S

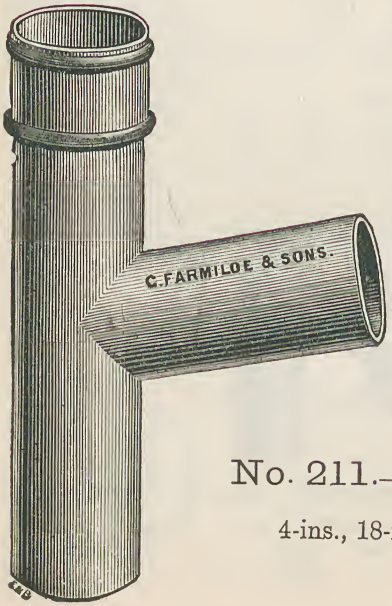
Lead Bend.

4-ins.... each 5/9

No. 211a.—Cast Iron Reducing Sockets, for No. 211.

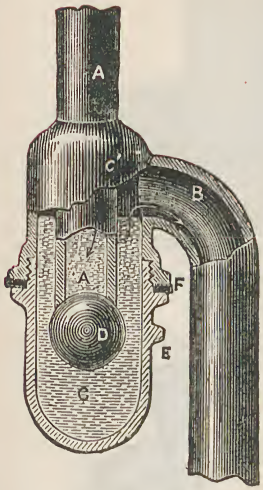
These are very useful where the ventilating pipe has to be reduced from 4-in., the size of No. 211, to either 2½-in. or 3-in.

For 2½-in. pipe ... each 1/0
,, 3-in. ,, ... ,, 1/0



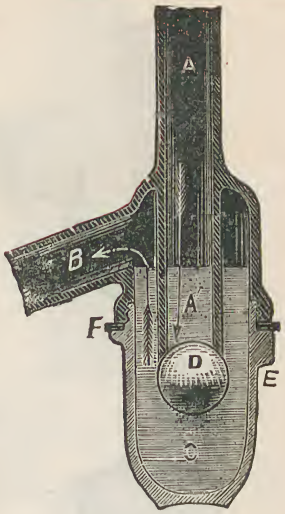
No. 211.—Cast Lead Junction.

4-ins., 18-ins. high ... ... each 6/9



FULL S TRAP.

A—Inlet from Sink or other fixture.
B—Outlet to Sewer.
C—Glass or Metal Cup.
D—Floating Ball Valve.
E—Lug for unscrewing Cup.
F—Rubber Flange. Arrows indicate flow of water.



HALF S TRAP.

No. 212.—The Bower Patent Sewer-Gas Trap possesses the following advantages:—

1st. Seal against sewer-gas under pressure.
2nd. Seal against absorbed gases.
3rd. Seal against back water.
4th. Seal is not broken by siphonage.
5th. Seal is not broken by evaporation.
6th. Self scouring or cleaning.
7th. Removable section.
8th. Glass section, exposing valve mechanism.
9th. Compression of valve allows for expansion by freezing.
10th. Can be repaired or valve renewed by any one.

FULL S TRAP.				SIZE.	HALF S TRAP.			
No.	With Glass Cup.	No.	With Lead Cup.	Inlet. Outlet.	No.	With Glass Cup.	No.	With Lead Cup
	s. d.		s. d.			s. d.		s. d.
1	5 6	2	7 6	1-in. by 1¼-in.	3	5 6	4	7 6
5	5 6	6	7 6	1¼ ,, ,, 1¼ ,,	7	5 6	8	7 6
9	5 6	10	7 6	1¼ ,, ,, 1½ ,,	11	5 6	12	7 6
13	7 0	14	9 6	1½ ,, ,, 1½ ,,	15	7 0	16	9 6
17	7 0	18	9 6	1½ ,, ,, 2 ,,	19	7 0	20	9 6

Glass Cups, large, 1/0; small, 9d.; Lead Cups, large, 3/0; small, 2/6. Balls, 1/0 & 9d. each; Flanges, 6d. & 4d. each.

Large Cups, Balls, and Flanges are used on 1½-in. by 1½-in., and all sizes above. Lead Cups should be used where hot water passes the trap.

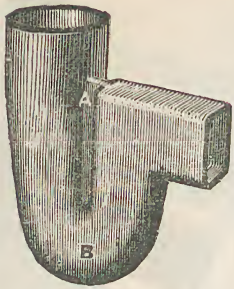


Fig. 1.

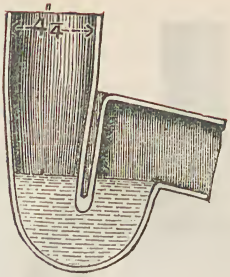


Fig. 2.—Section.

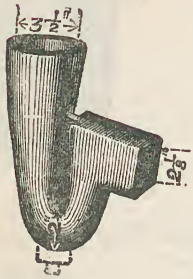


Fig. 3.

Fig. 4.

Fig. 5.

No. 213.—Hellyer's Patent Cast-lead "Anti-D-Trap."

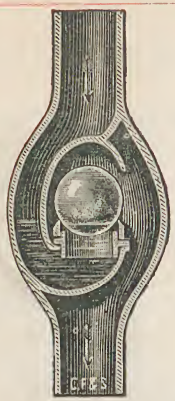
These traps are made of the softest and purest lead, without solder of any kind, and are perfectly smooth both inside and out.

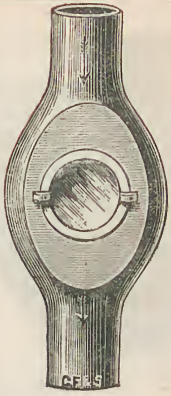
They are both self-cleansing, and, when their branches are ventilated, non-syphoning. There are no corners or places about them where filth or paper can find a lodgment. The space between the bottom of trap and the under side of the dip is purposely made much smaller than the rest of the trap, as shown in Fig. 2, to ensure an entire change of the contents of the trap every time a flush of water is sent into it. The depth of the water-seal is 1¾-in.

Fig. 1.—"Anti-D-Trap," 8-lb. (for water-closets, slop-sinks, &c.) ... ... each	7/0
Fig. 3.—3½-in. to 2-in. ditto 9-lb. ditto (for sinks, baths, &c.) ... ... each	4/0
Fig. 4.—1¼-in. ditto, 9-lb. lead (for lavatories &c.) ,,	2/0
Fig. 5.—1¼-in. ditto, with enlarged mouth (for sinks, baths, &c.) ... ... each	2/3

EXTRA.

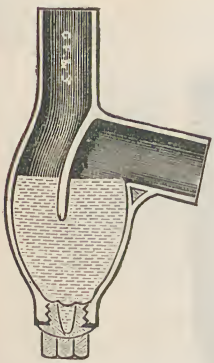
If with brass cap-and-screw to traps, Figs. 3, 4 and 5 ... each	1/0



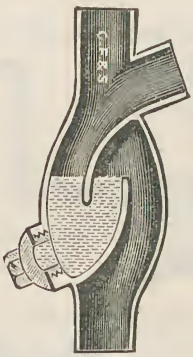


No. 214.—JENNINGS' Patent Ball Trap, perfect under all conditions, for bath and lavatory wastes, &c.

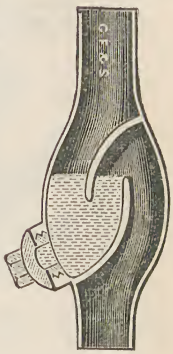
1-in. ... ... each	5/0	2-in. ... ... each	15/0
1¼-in. ... ... ,,	7/6	2½-in. ... ... ,,	20/0
1½-in. ... ... ,,	10/0		



No. 1.



No. 2.



No. 3.

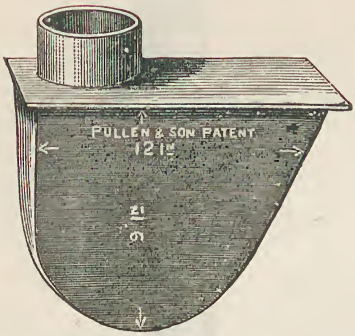
No. 214a.—CLAUGHTON'S Patent Cast Lead Stench Traps.

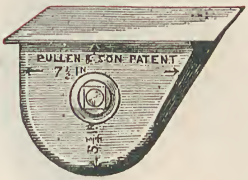
These traps are strong, compact, easy to fix, and cannot get out of shape. Each trap is fitted with screw plug.

No. 1.—Angle Trap, with outlet to pass through walls, &c. .. .. each 1¼-in. 1/9 1½-in. 2/0

No. 2.—Straight Trap with branch for overflow pipe, each 1-in. 1/9 1¼-in. 2/2

No. 3.—Straight Trap, suitable for sink, &c., each 1¼-in. 2/1 1½-in. 2/4 2-in. 3/6





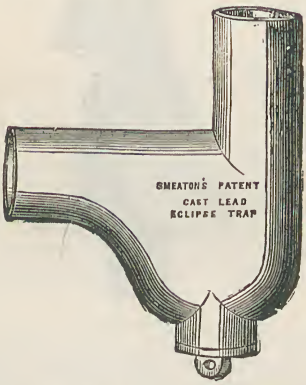
No. 215.—Pullen's Patent Cast Lead D Traps.

For Closets.

Square, 6-ins. wide	each	6/6
Round, 6 „ „	„	6/0
„ 5 „ „	„	5/6

For Sinks and Baths.

Square, 3-ins. wide	each	3/0
Round, 3 „ „	„	2/6
If with cap and screw, extra	„	1/3



No. 216.—Smeaton's Patent Machine Made Cast Lead "Eclipse" Traps.

For Closets.

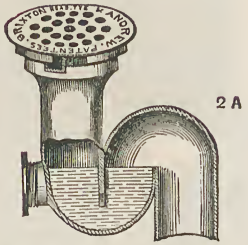
4-in.	each	6/9
4-in., with flange to rest on joist	„	7/6

For Sinks and Baths (without flanges but with brass screw plugs).

3-ins.	each	6/6	$1\frac{1}{2}$-in. ... ... each 3/9
2 „	„	4/3	$1\frac{1}{4}$ „ .. ... „ 3/6

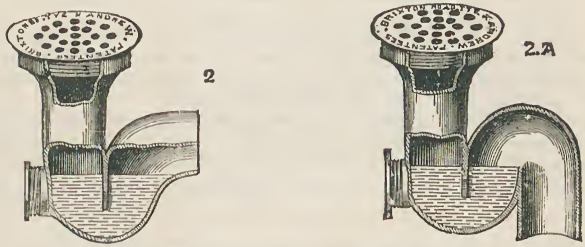
No. 220.—Tye & Andrew's Patent Sink Trap in Galvanized Iron.

Traps with Clip Grates for Stone Sinks.

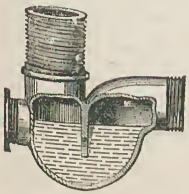


	3-ins.	4-ins.	6-ins.
Figs. 2 and 2A, fitted with brass grate, lining, and clips, brass screw boss and plain outlet for lead pipe	5/6	6/6	25/0
Ditto, fitted with brass grate, lining, and clips, brass screw boss and screw on outlet for iron barrel	6/0	7/6	30/0

Traps with Screw Grates for Lead and Slate Sinks.



	3-ins.	4-ins.	6-ins.
Figs. 2 and 2A, fitted with brass screw grate, brass screw boss, and plain outlet for lead pipe	7/6	9/9	30/0
Ditto, fitted with brass screw grate, brass screw boss, and screw on outlet for iron barrel ...	8/6	11/0	35/0

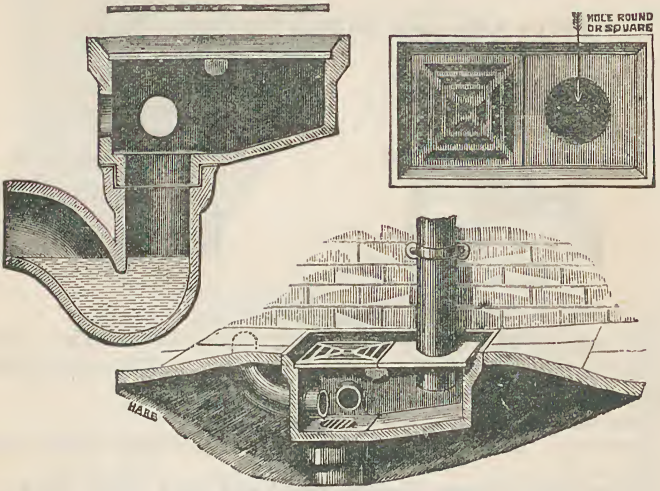


Traps for Waste Pipes from Baths, Lavatories, &c.

	3-ins.	4-ins.	6-ins.
Figs. 4 and 4A, fitted with brass screw boss and screw on inlet and outlet ...	5/0	6/3	11/3

The 6-inch trap has thread cut for 3-inch barrel, the 4-inch trap has thread cut for 2-inch barrel, and the 3-inch trap has thread cut for 1½-inch barrel.

Stoneware Traps, Grease Tanks, Gullies, &c.



Size—16-in. by 8½-in., by 7-in. deep.

No. 221.—Bellman's Patent Gully.

Avoids all splashing, forms drain for area of surface, ventilates pipes and trap, is easy of access for cleaning, traps not included, receives and disconnects one rain-water pipe and three waste pipes.

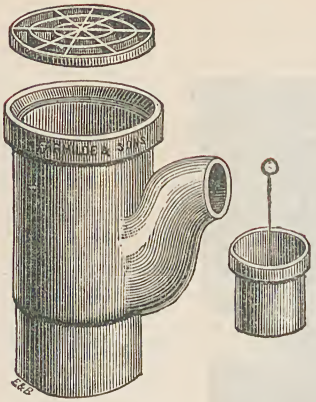
The ordinary P or S trap to be used in connection with Gully, being in a separate piece, can be placed at any angle to meet the drain exactly, thus ensuring a perfect joint, the Gully being placed at right angles. This is a great advantage over other arrangements made with the trap in one piece.

Orders should state size of Rain-water Pipe, and whether Round or Square.

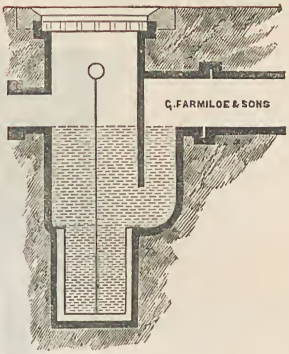
Description from "The Architect, August 26th, 1882.—The "Bellman" Gully is of stoneware, and intended to carry off the rain-water from the house, as well as through waste pipes, disconnecting the whole from the building so far as any contamination from the drain may be likely to accrue. It will be seen that it consists of an oblong vessel, its size being 16-ins. by 8½-ins., by 7-ins. deep. Over the bottom opening communication with the trap to the drain is placed a grating to prevent any pieces of foreign matter that may have escaped from sinks, &c., from entering the drain, and as the top grating is loose and large enough to obtain full access to the Gully, it can be easily and readily cleared at any moment. The water from the roof passing direct into the Gully prevents splashing, and to a certain extent this pipe acts as a ventilator to pipes and trap. But a most important advantage the "Bellman" Gully can claim over most others is, that by using a "P" or "S" trap it can always be fixed at right angles, as the trap can, of course, be turned in any direction to meet the drain. Thus a perfect water-seal is always obtained, for should the weather be very dry, and a deficiency of rain-water occur, the constant influx of water from the waste-pipes of the household will effectually secure this against any amount of evaporation, and the constant changing of the water, so to speak, will keep it comparatively fresh.

With Galvanized Grating 10/0

Single Gullies for sink waste only 3/9



Single.



Single, with back inlet.

No. 222.—Dean's Patent Stench, Silth, and Grease Traps.

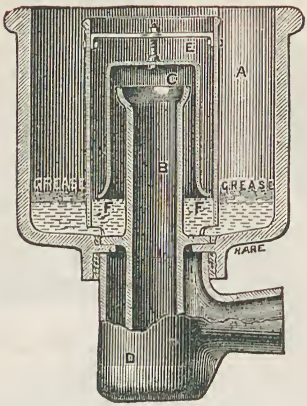
These traps are made of stoneware, with cast iron grating and cast iron receptacle, into which all filth must fall, and which can be taken out and emptied as often as required.

The prices quoted include the cast iron grating, cast iron receptacle, and glazed earthenware radiated bricks; these bricks make a neat finish at the surface, and save cutting the pavement to the round collar of the trap.

	Single.	Single with back inlet.
18-in.	48/0	50/0
15-in.	39/0	41/0
12-in.	28/0	30/0
9-in.	12/0	14/0
8-in.	11/0	13/0
7-in.	10/0	12/0
6-in.	9/0	10/6

Double Traps same prices as Single with back inlet.

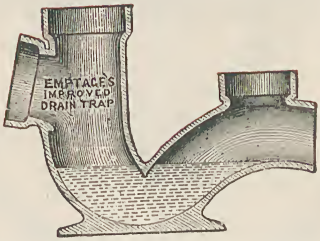
Rectangular Double Trap, 11-in. × 7-in.	15/0
Square Single do., 7-in. × 7-in.	11/6



No. 223.—Doulton's Patent Combined Automatic Flush Tank and Grease Interceptor. In strong salt glazed stoneware, to discharge 12 gallons ... ... each £2 5 0

This tank is so constructed that the passage of any grease to the drain is rendered impossible, and thus a hitherto insurmountable difficulty has been overcome.

The action is as follows:—The discharge from sink passes into the tank A, and when a sufficient head has been obtained to force the trap D, the syphon action is set up, and continues until the water reaches the level of the bell mouth F F, but as there is an outer casing E, open at the top, which descends some inches further down into the tank than F F, the grease—at all times floating—never reaches the outlet, and can be periodically removed. The water and sludge alone are sucked under the bottom of the casing E, the grease being left.



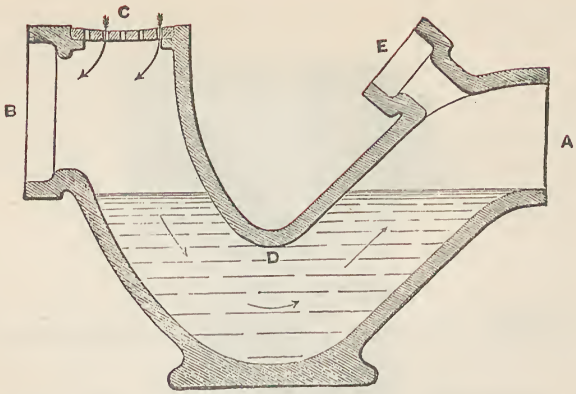
No. 223a.—EMPTAGE'S Improved Ventilating Drain Trap.

The construction of all ordinary drain syphon traps are such that their seals are on a level with the invert of the house drain, and it is therefore very difficult for buoyant substances to pass through, as the discharge simply flows down into the water without having any scouring effect upon it; the result being that the trap is quickly filled upon the house side with paper, &c., thereby offering additional resistance to the flow, and converting the trap into a miniature cess-pool, through which sewage gases can very readily pass.

In the construction of Emptage's Improved Trap all these evils are entirely avoided. The inlet arm, projecting lip, and upright limb, also the drop from the drain invert to the trap seal are so arranged that the discharges from the house drain are delivered clearly, and with such weight upon the water that everything is carried through at once to the drain beyond.

Effective provision is also made for foot and cess-pool ventilation, by which means a constant current of air is maintained throughout the drain.

6-in. ... ... each 10/0



No. 224.—Weaver's Ventilating Sewer Air Trap in strong Stoneware.

A—Outlet to Sewer. B—Inlet from House. C—Fresh Air Inlet. D—Dip of Trap, 3½-ins. E—Junction, connecting with special Upright Pipe, to Ventilate Sewer.

This Trap is a compact convenient form of Syphon ventilator, designed to disconnect the house drain from the public sewer or cesspool. From its simplicity of form, economy of space and cost, certainty of action, non-liability to derangement or stoppage by silting or floating materials—which the lines and curves are specially designed to avoid, it will meet a universal want among householders, being adapted to all descriptions of drainage in town or country.

Sewer Gas is prevented passing the water line D by force, for it is conveyed away to a convenient outlet through the junction E. Any foul matter, the volatile products of organic decomposition within the sewer, which may effect a silent passage through the water-seal by the process of conduction, are immediately diluted with a large volume of fresh air, descending through the inlet C, and swept outwards.

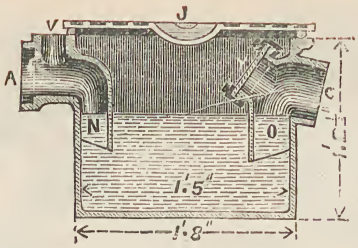
DIRECTIONS FOR FIXING.

The Trap is to be fixed with its base quite level in a line of pipes outside the building. The junction E to be connected with a rain-water or special upright pipe carried to the house top clear of windows and chimneys. The air inlet C must communicate with the atmosphere by pipes brought to the surface of the area or yard, where the grid may be placed to carry off water. If more convenient, a pipe may be attached to a wall and carried up a few feet.

All waste, bath and slop pipes, should communicate with the air outside the house by short pieces of pipe with open ends pushed through the walls, or may preferably be connected with the Registered "Weatherly Disconnector" Trap for Waste-water Pipes.

The lines of the Trap are designed to convey floating and sedimentary matter without obstruction, but if stoppage occurs it is removed by the fresh air inlet C.

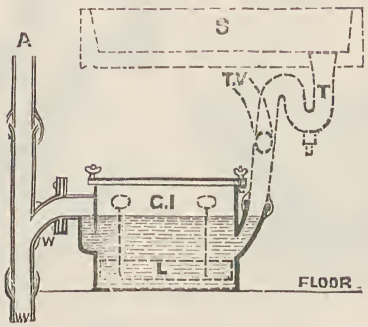
4-ins.	each	6/6
6 ,, ...	,,	9/0
9 ,, ...	,,	15/0



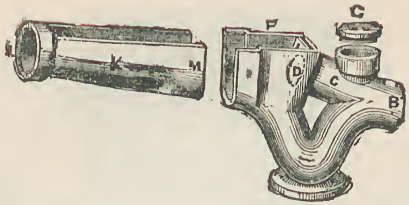
No. 225.—HELLYER'S Patent Grease-intercepting Tanks or Traps.

Extra strong vitrified stoneware grease-intercepting trap, medium size (20 by 13, and 14½ deep), fitted with galvanized cover, Y, for access to drain, and with galvanized cast iron cover to tank, J, and india rubber packing, each £2 8 0

No. 225a.—Ditto. Large size (24-in. by 20-in. and 14½-in. deep) ... ... each £3 12 0



No. 225b.—Strong galvanized cast iron "kitchen" grease-trap, with cover, gun-metal bolts and nuts, and grease-lifter complete ... ... each £1 16 6



No. 225c.—HELLYER'S Patent Extra Strong Vitrified Stoneware Drain-sentinel Trap, fitted with galvanized cast-iron plate, D, for access to the sewer side of the trap.

	For 4-in. drain.	For 6-in. drain.	For 9-in. drain
Each	19/0	25/0	37/0
Ditto. Channel, K, for forming the disconnection chamber, each	7/0	8/0	14/0
EXTRAS.			
If with side inlet on ditto, for branch drain, each	1/9	2/6	3/3
Ditto, one on each side ... ... ,,	3/6	5/0	6/6

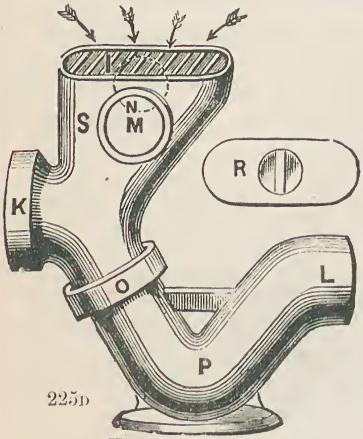


FIG. 1.—View.

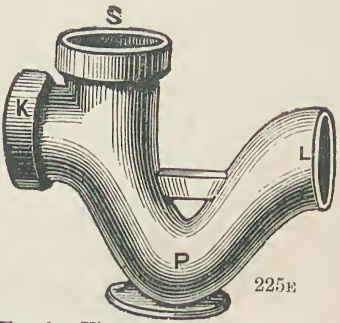


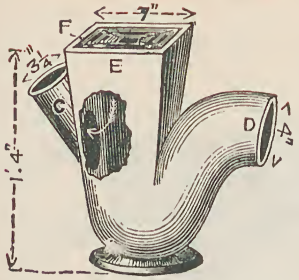
FIG. 6.—View of Trap, with 6-in. Inlet and Outlet, and Head S, for 6-in. pipe-shaft,

No. 225d.—HELLYER'S Patent Ventilating Drain-syphon and Sewer-Interceptor.

	For 4-in. drain	For 6-in. drain.	For 9-in. drain.
Fig. 1.—Ventilating drain-syphon and sewer-interceptor, with galvanized cast iron grating each	17/0	22/0	31/0

No. 225e.—Ditto.

Fig. 6.—Ditto. ditto with socket S, for pipe shaft, each	11/6	15/0	21/0

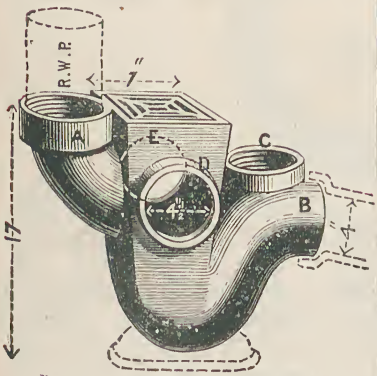


SMALL SIZE, WITH INLET-ARM, C.

No. 225f.—HELLYER'S Patent Stoneware Waste-receiver and Drain-interceptor.

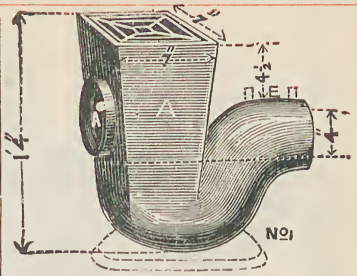
Drain-interceptor and galvanized cast iron grating.
Each 6/0

EXTRA.
If with two arms ... ... each 0/9
„ three arms ... „ 1/6



RAIN-WATER INTERCEPTING TRAP.

No. 225h.—HELLYER'S Patent Stoneware Drain-interceptor and galvanized cast iron grating, for receiving rain-water pipe, &c.
Each 6/9



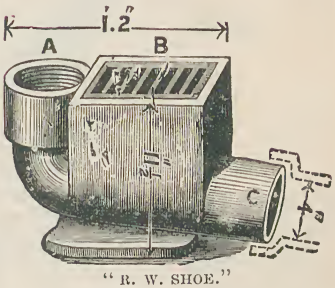
SMALL SIZE, WITH INLET-HOLE, B.

No. 225g.—HELLYER'S Patent Stoneware Drain Interceptor.

No. 1. Small size Drain-interceptor, and galvanized cast iron grating.
Each 6/0

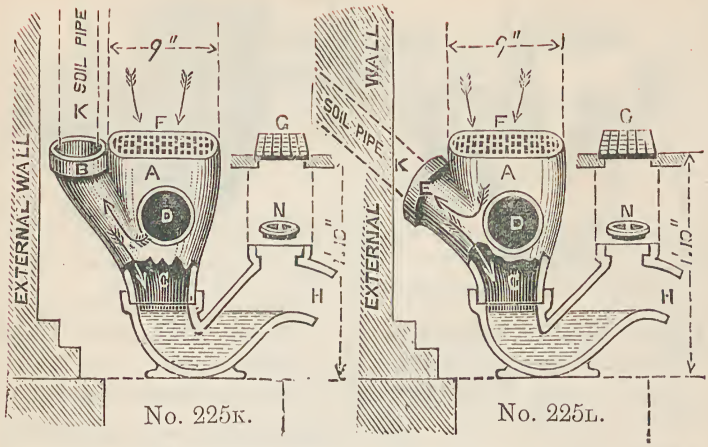
No. 2. Medium size, ditto ... ... each 12/6

No. 3. Large size, ditto ... ... each 21/0



"R. W. SHOE."

No. 225i.—HELLYER'S Patent Stoneware Rain-water Shoe, for connecting rain-water pipe to drain, and forming access to ditto... ... each 8/0



View of trap for receiving outside soil-pipe.

View of trap for receiving inside soil-pipe.

No. 225k.—HELLYER'S Patent Stoneware Drain-syphon and Soil-pipe Disconnector.

Soil-pipe trap with hopper and galvanized cast iron grating ... ...each 13/0

No. 2251.—Ditto, ditto ... ... ,, 13/0

EXTRAS.

If with out-go, H, for 6-in. drain ... ... each 1/0
,, galvanized cast iron plate, G. ... ... ,, 2/0

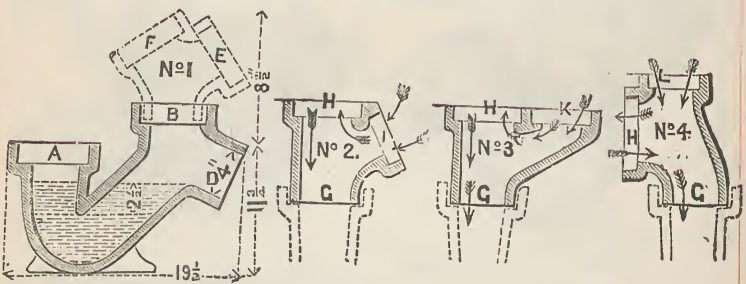


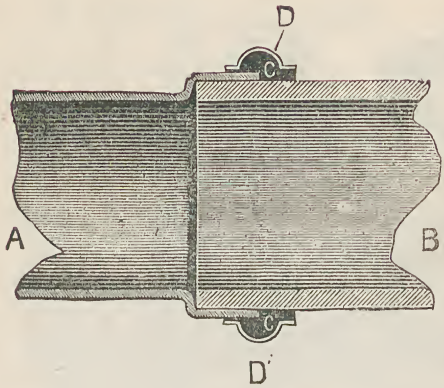
FIG. 14.

No. 225m.—HELLYER'S Patent Combination Soil-pipe Trap.

Soil-pipe trap, Fig. 14, for 4-in. drain ... ... each 5/6
Connecting pieces, Nos. 1, 2, 3, and 4 ... ... ,, 2/0

EXTRA.

If with out-go of trap for 6-in. drain ... ... each 1/0

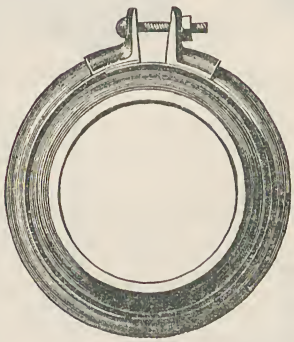


A.—Metal Pipe socketed to receive earthenware.

B.—Earthenware trap or pipe.

C.—Rebated rubber ring.

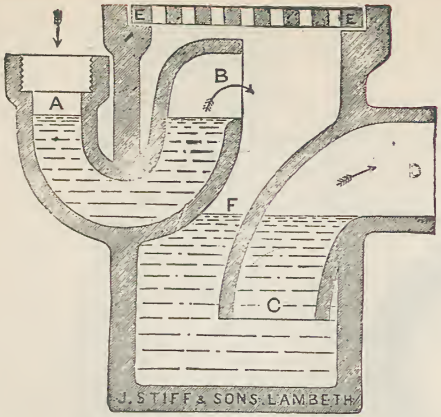
D.—Metal Ring fitted with screw for adjustment.

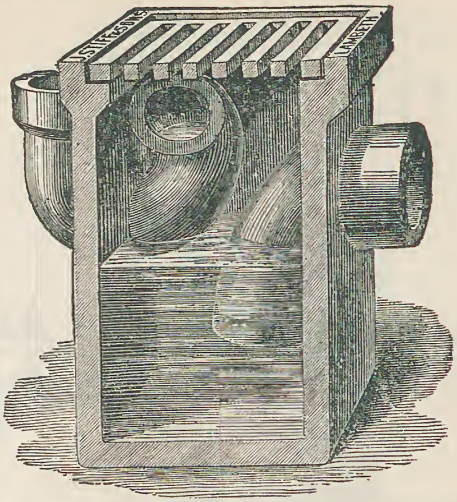


No. 225n.—Humpherson's Improved Pipe-Joint or Connection.

This simple contrivance has been introduced to meet a long recognised want in the jointing of earthenware traps to metal soil pipes, or of lead and iron pipes, which have hitherto caused so much trouble and expense by the failure of the lead or putty joint. It is easy of application, and made in various sizes, to suit all traps now in use. It consists of a rebated rubber ring, which is slipped over the junction of the two pipes; over this a metal band is placed, having a bolt for tightening the same and expanding the rubber ring, which makes a joint (allowing for all variations in temperature) perfectly secure and able to resist any pressure.

Each 5/0
If with two screws ... ... each 6/6





No. 226.—The New Registered Weatherly Disconnector Waste Water Trap.

For completely disconnecting the Waste Pipes of Sinks, Baths, Lavatories, Cisterns, &c., from the House Drains and Public Sewers, and for so trapping the Waste Pipes as to render it impossible for foul air to enter the house thereby.

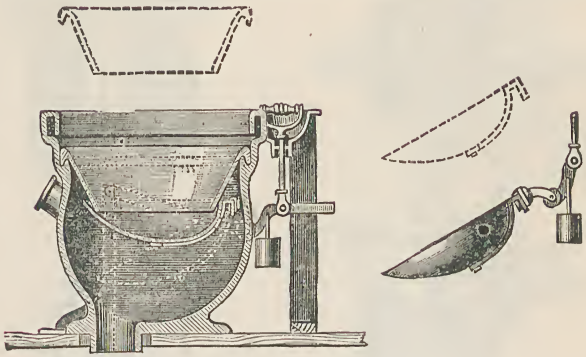
4-in. Drain, complete with Iron Grid, each 12/6 6-in. Drain, complete with Iron Grid, each 25/0

N.B.—A Head or Receiver with Iron Grating and two or more inlets can now be had to fit on top of these Traps at E. E. Rain-Water, Bath-Waste, and other Pipes can thus (as well as Sink-Waste) be all connected with one "Disconnector Trap." Price extra.

ADVANTAGES.—Perfect disconnection from house drain; easily cleansed syphon trap to waste pipe; efficient and accessible grease trap; waste pipe discharge concealed from view; open yard gully, strongly trapped; no splashing or overflow possible.

VENTILATORS, &c.

THE BANNER SYSTEM OF SANITATION.



No. 227.—Banner's Patent Water-Closet.

"There is no metal to corrode, and the basin is hermetically sealed by a water groove. It is one of the cleanest and simplest closets manufactured."—*Building News*, 10*th August*, 1883.

This apparatus is constructed in parts so arranged that any person can readily take apart, cleanse, and replace the whole.

The receiver is made in one piece of white earthenware, with inlet for water and flushing rim. Below this rim is a channel for containing water, and the basin is made with a turnover rim at top to dip into this channel, which forms an hermetically sealed joint; at the same time the basin can be easily removed, which is a distinctive feature in this invention.

The Saucer is also of earthenware, and is fitted on a metal bush, which fits into a slot in the axle.

The axle, being short, is not liable to get broken, as is the case in other closets.

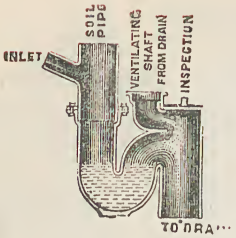
The dotted lines in sketch indicate the position the Saucer assumes when the handle is raised, so as to discharge the contents of the Saucer through the outlet.

The whole of the apparatus may be thoroughly ventilated by an outlet arm, as shown.

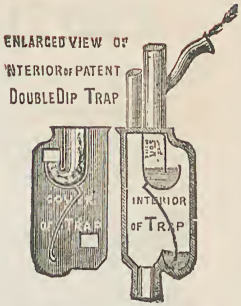
Banner's Patent Earthenware Closets with white basin ... ... each £3 10 0

EXTRA.

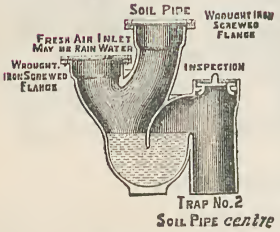
Large Supply Valve and Patent Regulator, fitted on frame of Closet ... ... each £1 4 0



No. 4.



No. 5.



No. 6.

No. 7.

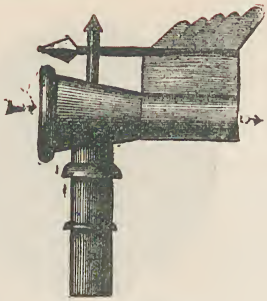
No. 228.—Banner's Patent Traps.

The great advantage of these Traps over the ordinary Syphon or Dip Traps are manifold and self-apparent.

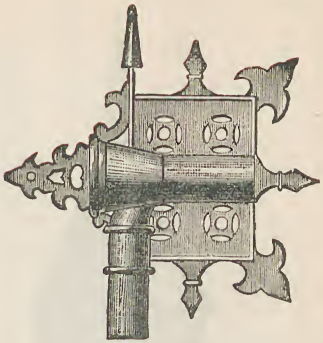
They are self-acting, always air-tight, flush clean as they receive all discharges from a fall of several feet, and cannot be unsyphoned; they may be used to ventilate the soil-pipe only, or the sewer or cesspool also. One trap inside or outside the house will suffice for any number of closets, and may be placed either below or above the floor or ground level. The fresh-air inlet pipes should be at least 2¼-in. in diameter, and carried to the open-air in the most convenient manner, and as may be most suitable either to the soil-pipe end Trap, or led direct into same if the "soil-pipe centre Trap" is used.

These Traps are made of rustless iron, and also in superior earthenware.

No. 4.	Soil pipe trap, in rustless iron (for end of soil pipe) ... ... each	£1	10	0
	Ditto, in earthenware... ... ... ,,	0	15	0
,, 5.	Double dip trap, which cannot be unsyphoned, in rustless iron ... ... ,,	5	5	0
,, 6.	Soil pipe trap, in rustless iron, for centre of soil pipe ... ... ,,	1	10	0
	Ditto, in earthenware... ... ... ,,	0	15	0
,, 7.	Earthenware grease trap ... ... ,,	0	8	0



No. 1.—Cowl.



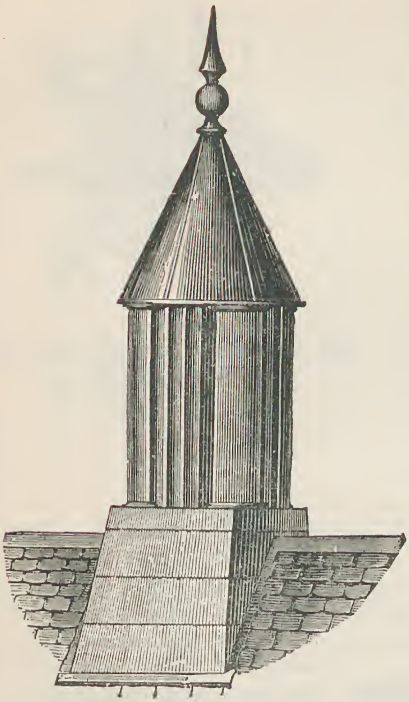
No. 2.—New design of Cowl and Trade Mark.

No. 3.—Finial Fixed Ventilator.

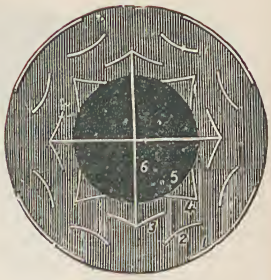
No. 8.—Down Draught.

No. 229.—Banner's Ventilators.

Nos. 1, 2, 3, or 8.	2-in. Fixed Cowl	each	£0	15 0
	2½-in. Fixed or Rotating Cowl...	,,	1	0 0
	3-in. ,, ,, ...	,,	1	5 0
	4-in. ,, ,, ...	,,	1	12 6
	6-in. ,, ,, ...	,,	2	7 6
	8-in. ,, ,, ...	,,	3	10 0
	10-in. ,, ,, ...	,,	4	10 0
	12-in. ,, ,, ...	,,	6	0 0
	14-in.	,,	8	0 0
	16-in.	,,	10	0 0
	18-in.	,,	12	10 0
Banner's cast iron air-tight covers—				
	2-ft. 6-in. by 1-ft. 6-in.	,,	1	10 0
	1-ft. 6-in. ,, 1-ft.	,,	1	0 0
	18-in. diameter	,,	1	5 0
	9-in. ,, ...	,,	0	15 0



No. 1.



PLAN.

Soil Pipe Ventilator.

No. 230.—Boyle's Patent Self-Acting Air-Pump Ventilators.

The Air-Pump Ventilator, as shown in Plan, consists of four sections, each acting independent of the other. Fig. 1 shows a curved baffle plate or guard to concentrate the current, and prevent the wind blowing through the slits opposite. Fig. 2, a curved plate to take the pressure off the vertical slits communicating with the internal chambers, and to prevent down-draught. The external air impinging on the diaphragm 3 is deflected on to the central radial, plate 4, creating an induced current, and in its passage drawing the air from the vertical chamber, 5, expelling it at the opposite opening. The foul air immediately rushes up the shaft connecting the Ventilator with the apartment being ventilated to supply the place of the air extracted, thus securing a continuous and powerful upward current. Fig. 6, partitions separating the chambers and preventing external air being drawn through the slits upon which the wind is not directly acting.

N.B.—In fixing the Ventilator, a wood base or frame is placed on the ridge, and covered with zinc or lead to make it water-tight; the Ventilator is then slipped over the top, and fastened with a few nails, as shown in elevation.

ROBERT BOYLE & SON'S latest improved PATENT (1882) AIR PUMP VENTILATOR.

	No. 1 & No. 1A.	No. 2.	No. 4.
12 inch diameter, Galvanized Iron, painted, 4 to 6 inch pipe ...	£1 12 0	—	—
14 ,, ,, ,, 4½ ,, 7 ,, ...	1 18 0	—	—
16 ,, ,, ,, 5 ,, 8 ,, ...	2 15 0	—	—
18 ,, ,, ,, 6 ,, 9 ,, ...	3 10 0	£6 0 0	£7 0 0
20 ,, ,, ,, 7 ,, 10 ,, ...	4 4 0	7 7 0	8 10 0
24 ,, ,, ,, 8 ,, 12 ,, ...	5 10 0	10 10 0	12 0 0
27 ,, ,, ,, 9 ,, 13 ,, ...	6 10 0	12 7 6	14 7 6
30 ,, ,, ,, 10 ,, 15 ,, ...	8 0 0	14 10 0	17 0 0
36 ,, ,, ,, 12 ,, 18 ,, ...	10 5 0	19 15 0	23 10 0
42 ,, ,, ,, 14 ,, 21 ,, ...	12 15 0	22 17 6	27 0 0
48 ,, ,, ,, 16 ,, 24 ,, ...	15 17 6	28 15 0	33 15 0
54 ,, ,, ,, 18 ,, 27 ,, ...	19 15 0	35 0 0	41 10 0

The Ventilators can be made with square, round or octagon bases, for fitting into turrets, &c., when required, without extra charge.
N.B.—In ordering, please state diameter of pipe required.

ROBERT BOYLE & SON'S latest improved PATENT AIR PUMP SOIL PIPE VENTILATOR,

Made of Strong Galvanized Iron, and painted with Enamel Paint.

6 inches diameter, 2 to 2½ inch pipe £0 12 0	10 inches diameter, 3½ to 4 inch pipe £1 2 0
8 ,, 3 ,, 3½ ,, ... 0 17 0	12 ,, 4 ,, 5 ,, ... 1 10 0

ROBERT BOYLE & SON'S latest improved DOUBLE-ACTION SOIL PIPE VENTILATOR,

Made of Strong Galvanized Iron, and painted with Enamel Paint.

8 inches diameter, 3 to 3½ inch pipe ... ... £1 10 0 | 10 inches diameter, 3½ to 4 inch pipe ... £1 15 0
12 inch diameter, 4 to 5 inch pipe £2 2 6

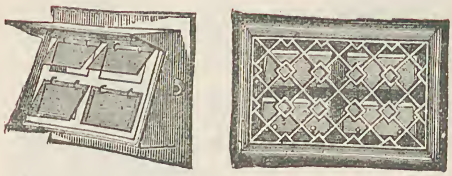
ROBERT BOYLE & SON'S PATENT SOIL PIPE COWL (cheap form),

Made of Strong Galvanized Iron, and painted with Enamel Paint.

2 inch pipe £0 8 6	4 inch pipe £0 13 6	5 inch pipe £0 17 0
3 ,, ... 0 10 6	4½ ,, ... 0 15 0	6 ,, ... 1 0 0

In ordering it must be particularly stated that the *Cheap* Soil Pipe Cowl is required.

BACK VIEW. FRONT VIEW.

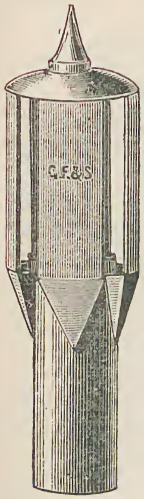


No. 231.—BOYLE'S Patent Mica-Flap Ventilators (outlet), for the discharge of heated and vitiated air from rooms into smoke-flues or other shafts.

The valves are composed of mica, which is light, rigid, and incorrodible, and are so sensitive that they open with the slightest appreciable up current in the flue, and immediately close against down draughts, and effectually prevent the smoke entering the room.

QUALITY.	Size of Front / Size of Box	11X5-in.* 9X3-in.	11X7-in.* 9X5½-in.	11X9-in. 9X7¼-in.	11X11-in. 9X9½-in.	16X11-in. 13½X9½-in.
No.1. Plain iron	... ...	4/0	6/0	9/0	11/0	16/0
„ 1. Japanned bronze	...	5/0	7/0	10/6	13/0	18/0
„ 1. Do. white and gold		6/0	8/0	11/6	15/0	20/0
„ 3. Brass trellis fronts...		7/0	10/6	14/0	18/0	25/0
„ 4. Brass hit-and-miss fronts		—	20/0	25/0	—	—

* Also Vertical Ventilators 5-in. × 11-in. and 7-in. × 11-in. at same prices.



No. 232.—DUNN'S Soil Pipe and Drain Ventilator (Registered), in strong zinc. Cheap, effective, ornamental.

6-in.	each	21/0
4-in.	,,	12/6
3½-in.	,,	10/6
3-in.	,,	8/6
2½-in.	,,	6/6

No. 232a. (LATE 240.)—SHARP'S Crown Ejector Upcast Ventilator.

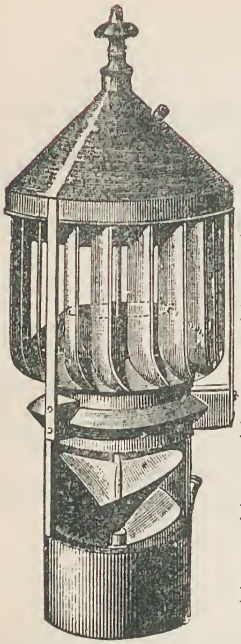
This Ventilator consists of three essential parts:—(1.) The shaft to which is fixed (2) a dome-shaped chamber or wind-chest, (3) a cap which surmounts the whole structure.

The shape of the dome and the position of the cap are so regulated that at whatever angle the wind strikes the ventilator, a partial vacuum is caused in the wind-chest, thus inducing an upward current in the shaft.

Plain ventilators, galvanized iron or zinc, each—

2-in.	3-in.	4-in.	4½-in.	6-in.
10/6	12/6	15/0	16/0	21/0
9-in.	10-in.	12-in.	14-in.	
30/0	35/0	42/0	52/6	

Terra Cotta, 14-in. ... ... each 12/6



No. 233.—The Empress Revolving Ventilator.

IN ZINC.

Dia. of pipe.	2-in.	2½-in.	3-in.	4-in.
Each ...	14/0	15/0	16/0	18/6

Dia. of pipe.	5-in.	6-in.	8-in.	10-in.
Each ...	23/0	25/0	34/0	44/0

Dia. of pipe.	12-in.	15-in.	18-in.
Each ...	55/0	75/0	95/0

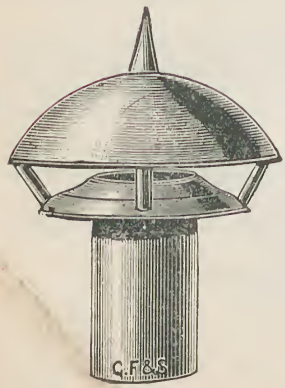
IN COPPER.

Dia. of pipe	2-in.	2½-in.	3-in.	4-in.
Each ...	26/0	27/0	28/0	30/0

Dia. of pipe.	5-in.	6.in.	8-in.	10-in.
Each ...	35/0	40/0	58/0	80/0

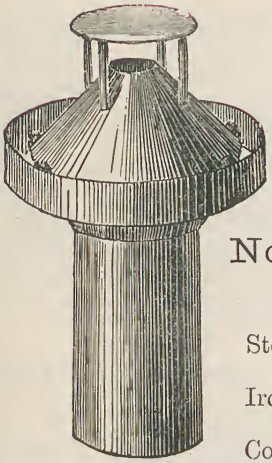
Dia. of pipe,	12-in.	15-in.	16-in.
Each ...	98/0	120/0	165/0

A can of oil is sent with each Ventilator without extra charge.



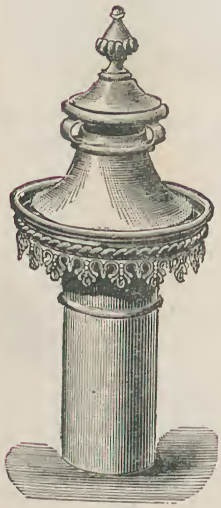
No. 233a.—George Farmiloe & Sons' Dome Ventilator.

Dia. of pipe.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Zinc, each	5/6	6/6	7/6	9/6	11/6
Copper ,,	8/6	10/6	12/6	14/6	16/6



No. 235.—The "Prince" Ventilator.

Size of pipe:	2-in.	3-in.	4-in.	5-in.	6-in.
Stout Zinc, each	6/	7/6	9/	10/6	12/
Iron gal.... ,,	9/	11/	13/	15/	18/
Copper ... ,,	15/	19/	23/	26/	30/



No. 236.—The "New Prince" Ventilator.

Dia. of pipe.	Japanned.
2-in. ... ... each	8/6
2½-in. ... ... ,,	9/6
3-in. ... ... ,,	12/0
3½-in. ... ... ,,	13/0
4-in. ... ... ,,	17/6
4½-in. ... ... ,,	20/0

No. 237.—Kite's Soil Pipe Ventilators.

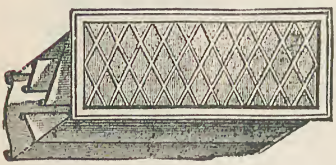
The Exhaust Ventilator for drawing out Sewer Gas should be placed at the highest point of the drains, and carried to the top of the building, but provision in all cases should be made for the admission of fresh air into the drains.

The Inlet Ventilator is intended to be placed on top of an air shaft placed lower down the drains, and connected with a bend turned towards the upper part of the drain. This Ventilator is so constructed that by the slightest motion of the wind it sends down fresh air into the drains, thus diluting the Sewer Gas and driving it out quite harmless. The Exhaust Ventilator should be fixed the higher of the two, in order that in still or foggy weather, on the Syphon principle, the warm air in the drains will ascend up the longer shaft, and the cold air descend the shorter one, thus keeping up a continuous current of fresh air through the drains at all seasons of the year.

Either Ventilators, japanned zinc,

2-in. 8/6 2½-in. 10/0 3-in. 11/6 3½-in. 13/0 4-in. 14/6

Larger sizes in proportion.



No. 238.—Kite's Chimney Breast Ventilator.

The noiseless Chimney Breast Ventilator is constructed on the principle of the Patent Exhaust Roof Ventilator, and made to be inserted into Chimneys near the ceiling, for extracting the vitiated air from Dwelling-rooms, &c. no loose parts to make an unpleasant noise.

Made in strong galvanized wrought iron,

9-in. × 3-in.	13½-in. × 3-in.	9-in. × 6-in.	13½-in. × 6-in.	13½-in. × 9-in.
10/6	12/6	12/6	15/0	17/6

Pannelled fronts with copper wirework,

15/0	17/6	20/0	20/0	22/6

No. 239.—Kite's Wall Inlet Ventilator.

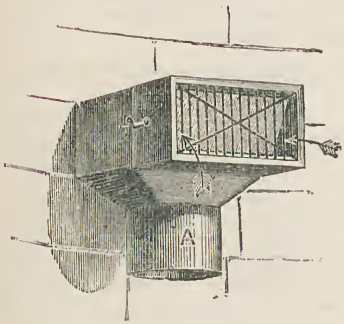
Kite's Improved Wall Inlet Ventilator for dispersing fresh air upwards into Rooms, &c., without draught, and made with adjustable fronts, which can be partially or wholly opened or closed as required. Suitable for Dwelling-rooms, Schools, Warehouses, Factories, &c. To be fixed 5-ft. 6-in. to 6-ft. above the floor line to the top of Ventilator.

6-in. by 9-in. 10/6 9-in. by 9-in. 15/0 13½-in. by 9-in. 20/0

Cast-Iron Ventilating Gratings for External Walls, prices according to size and pattern.

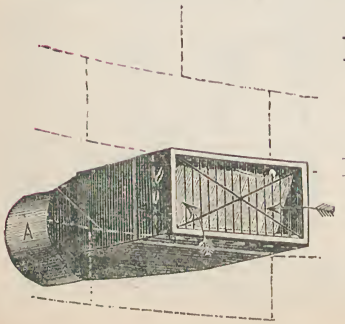
No. 239a.—Hellyer's Patent Double-Cap Ventilator.

Dia. of inside of pipes.	2½-in.	3-in.	3½-in.	4-in.	5-in.
Strong zinc, painted					
Each	8/0	8/6	9/6	11/0	15/0
Do. in copper, each	—	31/0	32/6	35/0	—



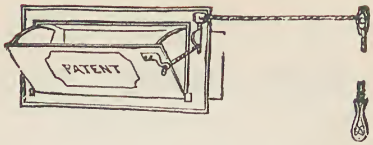
No. 239b.—Hellyer's Upright Mica Valve Inlet.

Encased with zinc, for fixing on top of 2-in. air pipe ... ... each 7/9
Do. do. 3-in. ... ,, 8/3
Do. do. 4-in. ... ,, 10/0



No. 239c. — Hellyer's Horizontal do.

For 2-in. pipe ... each 7/9
Do. 3-in. pipe ,, 8/3
Do. 4-in. pipe, ,, 10/0



No. 241.—Sheringham Ventilator for the introduction of fresh air through an external wall without a draught.

It will be found that, when the Ventilator is allowed to remain open (or so far as may be considered necessary) that its peculiar construction will direct the incoming current of fresh air along the ceiling, where it will spread on all sides, and become warm; so that, in its descent, it will not cause the slightest draught, but imperceptibly force the air below to the fireplace, or partly to the chimney outlet ventilator, thus thoroughly ventilating the apartment, and in all cases effectually curing a smoky chimney, when it arises from either of the prevailing causes, viz., a deficient, or an ill-directed supply of air.

The tendency of the door is always to remain open, but it may be adjusted to any angle, or closed entirely, by a single flexible cord, fastened below, in the usual manner, or by a small weight attached, the latter being the better mode.

Sheringham Ventilator (Inlet) to be complete, requires Air brick, Weight and Cord, Leading Pulley.

QUALITY OF VENTILATOR. Size of Box. Size of Front.	9 by 3. 11¼ by 5½.	9 by 6. 11 by 8½.	13½ by 6. 16 by 8½.	15 by 10. 19 by 14.	
	A	C	B	D	
No. 1. Iron—Plain	4/0	5/6	7/0	21/0	
,, 4. Do., Painted Bronze	4/6	6/0	7/6	23/6	
,, 6. Do., Japanned do.	5/0	6/6	8/0	25/0	
,, 2. Do., White and Gold	6/0	8/0	10/6	28/0	
,, 5. Galvanized—Plain	5/6	7/6	9/6	27/0	
,, 7. Do., White and Gold	8/6	10/0	12/6	35/0	
,, 8. Do., Coloured to Match Walls ...					
,, 3. Do., with Brass Fronts and Doors	18/6	30/0	50/0	—	

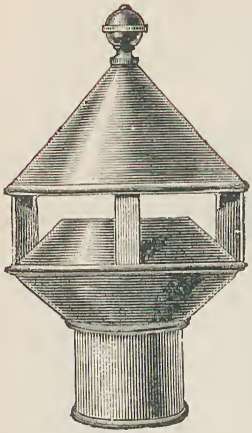
* Extra Heavy for Public Buildings.

Galvanized Ventilators and Air Bricks are recommended.
A, B, and C are the sizes more generally in use. D is extra heavy, for public buildings.

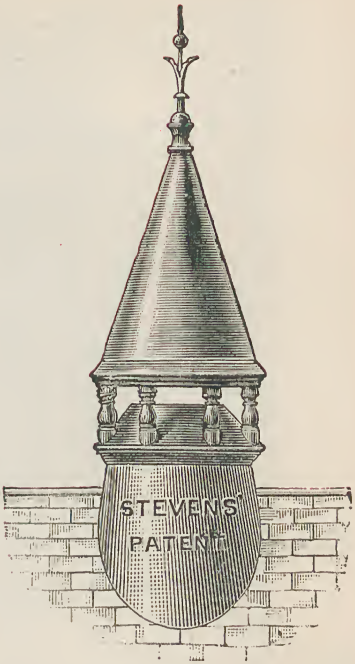
Ornamental Air Bricks	9 by 3-in.	9 by 6-in.	9½ by 9½-in.	13½ by 6-in.	13½ by 9½-in.	17 by 12-in.
Plain Iron ... each	6d.	10d.	1/4	1/4	2/0	2/6
Galvanized ... ,,	10d.	1/4	2/0	2/0	3/0	4/0

	A	B	C	D
No. 1. Weights, Plain Iron	4d.	6d.	5d.	1/0
,, 6. Do., Japanned Bronzed... ...	8d.	1/0	10d.	2/0
,, 2. Do., do., White and Gold ...	1/0	1/6	1/4	3/0
Extra Leading Pulley	4d.	4d.	4d.	10d.

Flexible Cord for all sizes, 2d. per yard. White Silk, for A, 6d.; for B, C, and D, 8d. per yard.



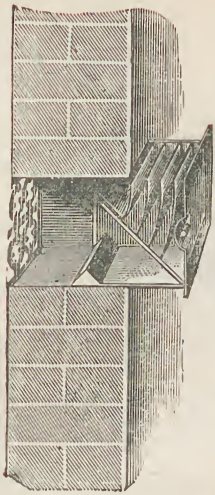
No. 1.



No. 3A.

No. 242.—Steven's Exhaust Ventilators for the efficient extraction of vitiated air from Churches, Factories, Private Dwellings, Hospitals, Ships, Billiard Rooms, Soil Pipes, Sewers. It is constructed upon sound scientific principles, that at whatever angle the wind strikes the cone it creates a partial vacuum in chamber and under hollow cap; thus securing a continuous powerful upward current and no down-blow. There is no mechanical movement to get out of order or create noise. They can be constructed to suit any kind of architecture. It is equally efficient in a slight breeze as in a gale.

Galvanized Iron. Shaft. ins.	Cone. ins.	No. 1. Round Base. £	s.	d.	No. 2. Same as No. 1, but with Square Base. £	s.	d.	Size of Square Base. Inside. ins.	Ornamental No. 3A. Shaft. ins.	Cone. ins.	£	s.	d.
2	6	0	8	0	—			—	12	24	8	8	0
3	8	0	10	0	—			—	15	27	10	10	0
4	10	0	13	0	—			—	18	30	12	12	0
6	13	1	0	0	1	2	6	7½	21	34	15	15	0
8	17	1	8	0	1	11	6	10	24	40	18	18	0
10	20	1	18	0	2	2	9	12	30	48	23	10	0
12	24	2	12	0	2	18	6	15					
15	27	3	6	0	3	14	6	18	*In ordering these Ventilators, the pitch of Roof must be given.*				
18	30	4	10	0	5	1	6	22					
21	34	6	0	0	6	15	0	25					
24	40	7	10	0	8	8	9	28					



No. 243.—Stevens' Drawer Inlet Ventilator, with iron air brick and cleansing frame complete.

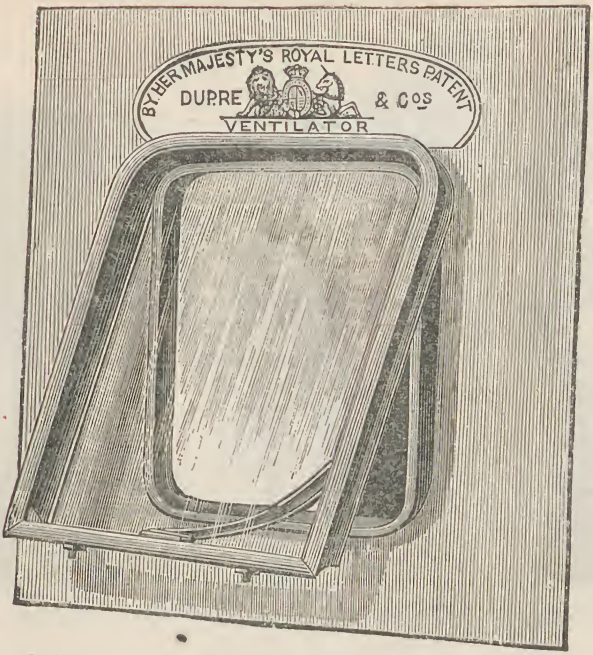
9 × 6 15/0 9 × 9 18/0 9 × 12 21/0 each.

Plate Glass or Decorated Fronts, extra.

Stevens' Drawer Inlet Ventilator is a most simple means of admitting fresh air into *Churches*, *Factories*, *Hospitals*, *Private Dwellings*, *Billiard Rooms*, *etc.* Its action needs but little explanation: the air entering a perforated brick in outer wall, is cleansed by woollen frame; then, guided by curved partitions, is made to take a vertical current towards ceiling, and as it ascends disperses itself, so that no draught is felt.

The admission of air is regulated by pulling the drawer out to the extent required, so when not in use it can be pushed back flush with wall, and as the front can be papered or coloured to match the wall, it renders it scarcely perceptible; or by placing a picture on front, it becomes an ornament.

This invention entirely dispenses with the vertical tubes, and greatly surpasses them in action, as the air passing through the Drawer is driven up instantaneously, so that it is carried well above the head before it begins to expand, but in the case of vertical tubes the air loses its force by friction on sides, thereby more likely to cause draught.



No. 243a.—DUPRE'S Improved Ventilating Roof Light, with glass, covered in and protected on every side, scarcely liable to breakage; a most important ventilator within the reach of all.

This simple arrangement has met with the highest approbation of architects, builders, and the public in general, as an article worthy of public notice and important to the whole community. Its object is to ventilate and purify through slate, tile, and other roofs, all dwelling-houses and other buildings requiring light and ventilation. This ventilator is easily understood, and is equally applicable to a mansion or a cottage; also, for public buildings, workshops, stores, stables, lofts, &c., and is as easily fixed in a roof as a common slate, and may be introduced in old roofs.

Any person with the slightest examination in the arrangement of this invention will perceive the impossibility of capillary attraction ever taking place, so that they are perfectly water-tight in the most exposed locality, without paint or putty. Superior and cheaper in every way than any method as yet known. They are generally made of strong zinc or galvanized iron, and may last as long as the slate.

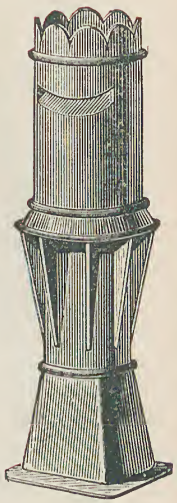
The stock sizes of these ventilating lights are as follows, but may be made to any other size ordered:

No. 1.—22-in. by 17-in.	For 26-oz. glass	... per doz.	£6 14 0
„ 2.—19-in. „ 14-in.		... „	5 12 0
„ 3.—16-in. „ 12½-in.		... „	4 4 0
„ 4.—13-in. „ 11-in.		... „	3 10 0
„ 5.—11-in. „ 9-in.		„	2 15 0

NOTE.—*When for tile roofing the base or plate is curved, to fit Bridgewater or other tiles.*

No. 243B.

No. 243C.



No. 243D.

No. 243b.—GEORGE FARMILOE & SONS' Victoria Tall-Boy.

With square bottom for brickwork ... ... each 30/0

	2-in.	3-in.	4-in.	6-in.
For Ventilators ... ... each	6/0	7/0	8/0	10/0

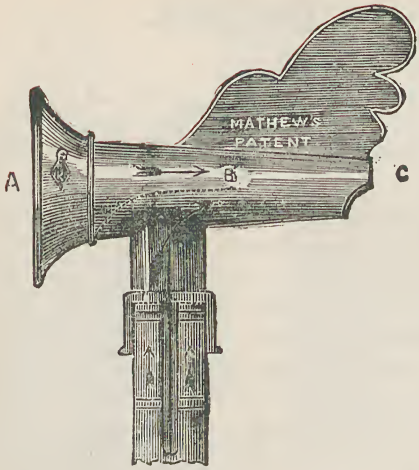
No. 243c.—GEORGE FARMILOE & SONS' Champion Smoke Disperser.

	9-in.	10-in.	11-in.
6-ft. high, 9-in. by 9-in. at bottom, each	19/6	22/6	25/0

If made 14-in. by 9-in. at bottom 1/0 extra.

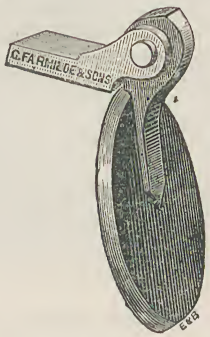
No. 243d.—GEORGE FARMILOE & SONS' Paragon Chimney Cowl.

Registered No. 6,716 ... ... each 30/0



No. 244.– Mathew's Patent Soil Pipe Ventilator.

2 in.	2½ in.	3 in.	3½ in.	4 in.
7/6	8/6	9/6	11/0	12/6 each.

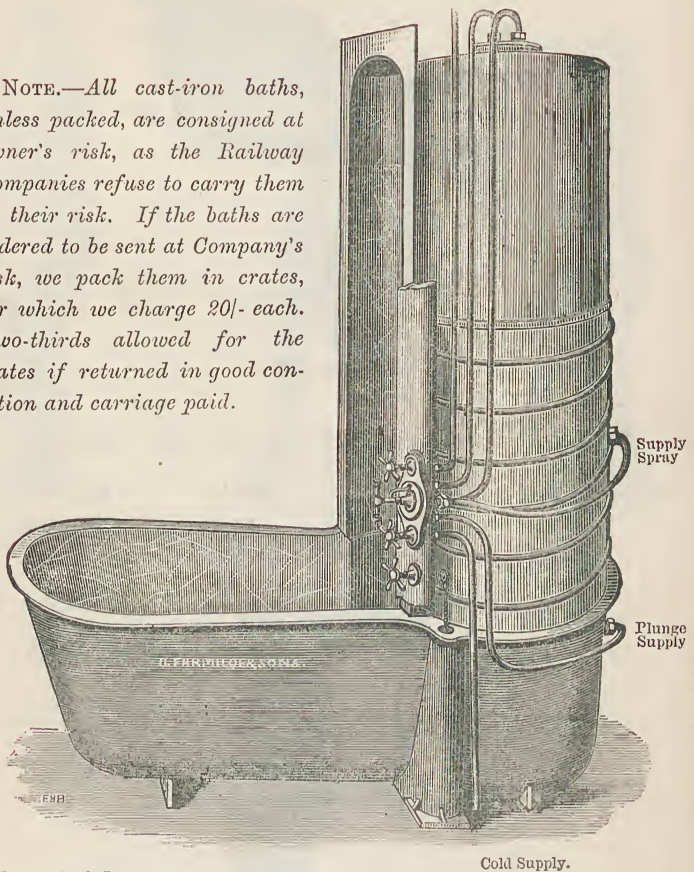


No. 245.—Flap Valves in Cast Brass, for preventing air blowing back into Waste Pipes.

	¾-in.	1-in.	1¼-in.	1½-in.	2-in.	2½-in.	3-in.	4-in.
Each ...	4d.	5d.	6d.	9d.	11d.	1/1	2/0	3/6

BATHS.

NOTE.—*All cast-iron baths, unless packed, are consigned at owner's risk, as the Railway Companies refuse to carry them at their risk. If the baths are ordered to be sent at Company's risk, we pack them in crates, for which we charge 20/- each. Two-thirds allowed for the crates if returned in good condition and carriage paid.*

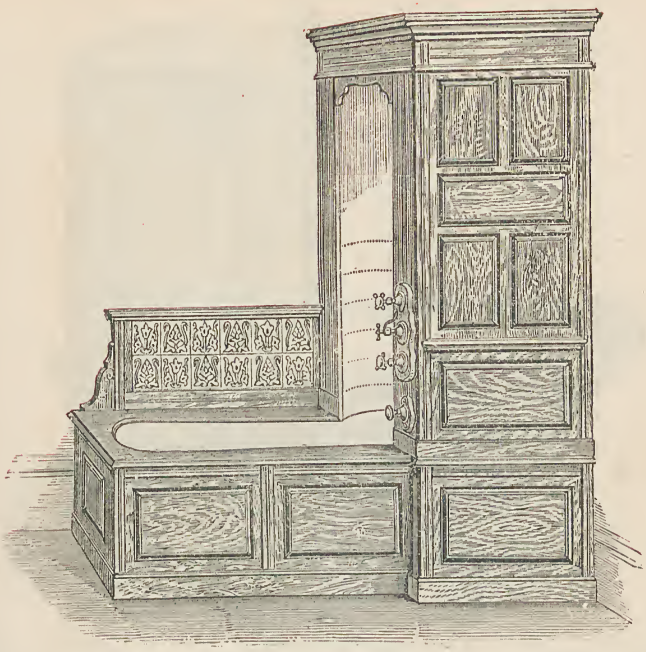


No. 246.—SHANK'S Patent Eureka Bath.

The Plunge Bath is of Cast Iron, enamelled, and is made with a large circular end; the canopy is made to suit this, so that the spray jets all converge to the centre, and ample room is provided for the bather.

Price complete as shown in sketch, with strong Zinc Spray Canopy, comprising Spray Shower and Douche, with Patent combined fittings for Hot, Cold, and Waste, the Bath and Spray enamelled inside, best quality, metallic ... ... each £22

Ditto, with Copper Spray Canopy, enamelled ... ... „ £27

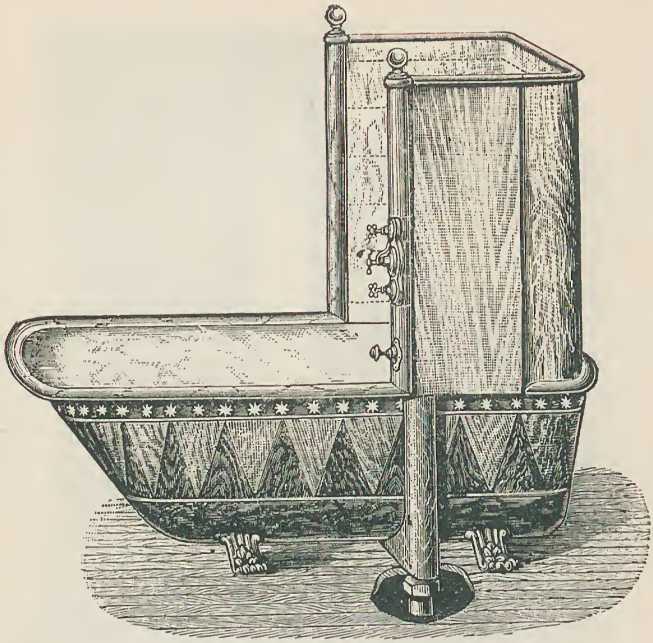


No. 246a.—SHANK's Patent Eureka Bath, as No. 246, fitted with Walnut or Mahogany Cabinet as per sketch. Prices as No. 246 and extra for wood-work as above.

Each £18 0 0

The No. 246 bath can be fitted with bottom Sitz arrangement at an extra charge of ... ... each 55/0

No extra charge is made for the improved adjustable trap above floor-line.

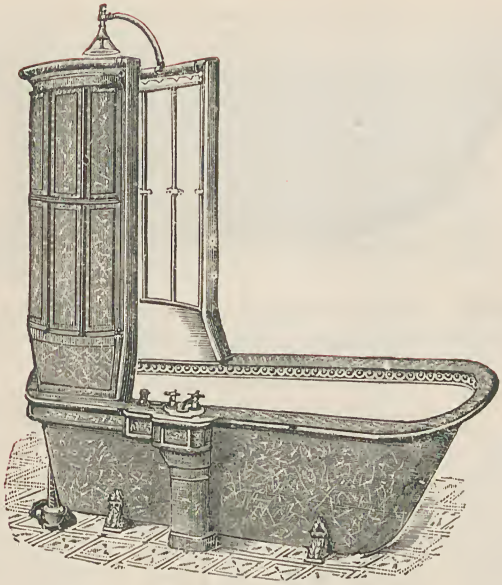


No. 246b.—Patent Independent Spray and Plunge Bath, with rolled edge and ornamental feet, finished outside, to stand without any wood enclosure.

The Plunge Bath is of cast-iron, and the spray of stout zinc plate, enclosing all the pipes, but which is removable for access to the pipes and fittings at any time.

It is fitted with a nickel-plated towel-rack, all pipes are fitted and connected ready for water supply, and the waste-pipe is trapped above floor-line.

Complete, inside enamelled, best finish, outside japanned any colour, nickel-plated fittings ... ... each	£16	10	0
Do. complete with shower arrangement ,,	20	0	0
A cheaper form of same appearance can be had with shower ... ... each	16	0	0

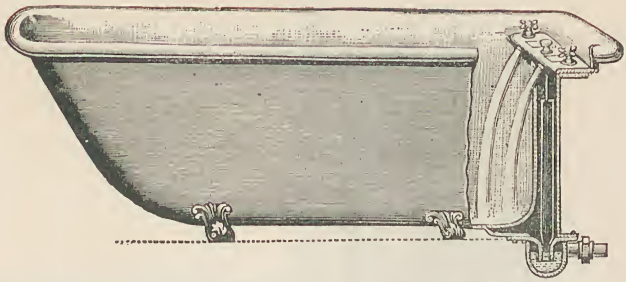


No. 246c.—The Luxury Independent Spray, Shower, and Plunge Bath, with handsome moulded wood coping, on ornamental feet to stand without wood enclosure.

In cast iron, with 6-ft. plunge bath, and all fittings complete for spray, shower and douche, enamelled inside, best finish, and grained or marbled outside.

Each	£26	8	6
In cast brass, ditto. ... ... each	52	18	0

Nickel-plated fittings, 33/6 extra.



No. 248.—Patent "Imperial" Cast Iron Combined Bath, with ornamental feet to stand without wood casing, with hot, cold, and waste fittings.

		ENAMELLED.		
	Japanned.	2nd finish.	Best finish.	Porcelain.
5-ft. Taper ..	£4 10 0	£5 13 0	£6 12 0	£9 0 0
5-ft. Parallel	4 12 6	5 18 0	6 18 0	9 10 0
5-ft. 6-in. Taper	4 12 6	5 18 0	6 18 0	9 10 0
5-ft. 6-in. Parallel	4 17 6	6 5 0	7 5 0	10 6 0
6-ft. Taper...	4 17 6	6 5 0	7 5 0	10 6 0
6-ft. Parallel	5 4 6	6 10 0	7 12 0	10 16 0

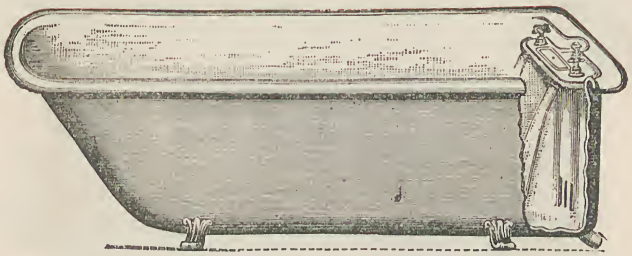
Ditto, grained outside in any style of wood or marble :—

	Japanned.	2nd finish.	Best finish.	Porcelain.
5-ft. Taper	£5 0 0	£6 3 0	£7 2 0	£9 10 0
5-ft. Parallel	5 3 6	6 9 0	7 9 0	10 1 0
5-ft. 6-in. Taper	5 4 6	6 10 0	7 10 0	10 0 0
5-ft. 6-in.Parallel	5 9 6	6 17 0	7 17 0	10 12 0
6-ft. Taper	5 9 6	6 17 0	7 17 0	10 18 0
6-ft. Parallel	5 16 6	7 2 0	8 4 0	11 8 0

No. 247.—Patent "Imperial" Bath, as above, but with flat rim for wood casing.

	Japanned.	2nd finish.	Best finish.	Porcelain.
5-ft. Taper...	£3 19 0	£5 1 0	£5 17 6	£8 5 0
5-ft. Parallel	4 3 6	5 10 0	6 6 0	8 10 0
5-ft. 6-in. Taper	4 2 0	5 6 0	6 3 0	8 15 0
5-ft. 6-in. Parallel	4 8 0	5 15 0	6 12 0	9 0 0
6-ft. Taper...	4 9 0	5 18 0	6 15 0	9 5 0
6-ft. Parallel	4 14 0	6 3 0	7 0 0	9 10 0

Nickel-Plated fittings, 3/0 extra.



No. 250.—Patent "Universal" Cast Iron Combined Bath, with ornamental feet, to stand without wood casing, with hot, cold, and waste fittings. Prices include marbling or graining outside.

		ENAMELLED.		
	Japanned.	2nd finish.	Best finish.	Porcelain
5-ft Taper...	£4 6 0	£5 10 0	£6 8 0	£9 0 0
5-ft. Parallel ...	4 10 0	5 18 0	6 16 0	9 5 0
5-ft. 6-in. Taper	4 10 0	5 15 0	6 16 0	9 10 0
5-ft. 6-in. Parallel	4 15 0	6 4 0	7 2 0	9 15 0
6-ft. Taper... ...	4 15 0	6 0 0	7 4 0	10 0 0
6-ft. Parallel ...	5 0 0	6 10 0	7 10 0	10 5 0

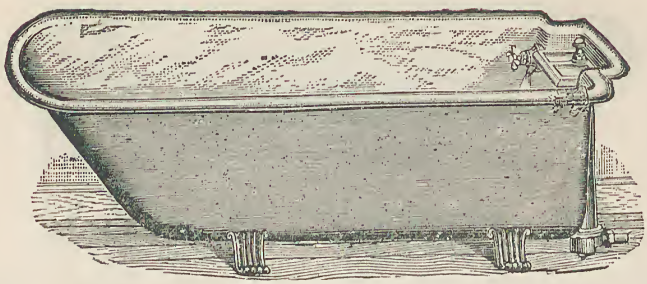
If plain painted outside, each 10/0 less.

No. 249.—Patent "Universal" Combined Bath, as above, but with flat rim and requiring wood casing.

	Japanned.	2nd finish.	Best finish.	Porcelain.
5-ft. Taper...	£3 7 6	£4 9 6	£5 6 0	£7 16 0
5 ft. Parallel ...	3 12 0	4 18 0	5 14 0	8 0 0
5-ft 6-in. Taper	3 10 6	4 14 0	5 12 0	8 6 0
5-ft. 6-in. Parallel	3 16 0	5 4 0	6 0 0	8 10 0
6-ft Taper... ...	3 17 6	5 2 0	6 3 0	8 16 0
6-ft Parallel ...	4 4 0	5 10 0	6 12 0	9 0 0

Nickel-plated fittings, 3/0 extra.

All the above are fitted with new adjustable trap above floor-line.



No. 250a.—Patent "Citizen" Cast Iron Combined Bath, with hot, cold, and waste fittings, with ornamental feet to stand without wood casing.

	Japanned.	Enamelled. 2nd finish.	Enamelled. Best finish.
5-ft. Taper	£3 7 0	£4 10 0	£5 5 0
5-ft. 6-in. Taper ...	3 10 0	4 15 0	5 11 0
5-ft. 6-in. Parallel ...	3 16 0	5 2 6	5 19 0
6-ft. Taper	3 17 0	5 5 0	6 4 0
6-ft. Parallel	4 5 0	5 14 0	6 13 0

Extra for marbling or graining outside, 10/0 each.

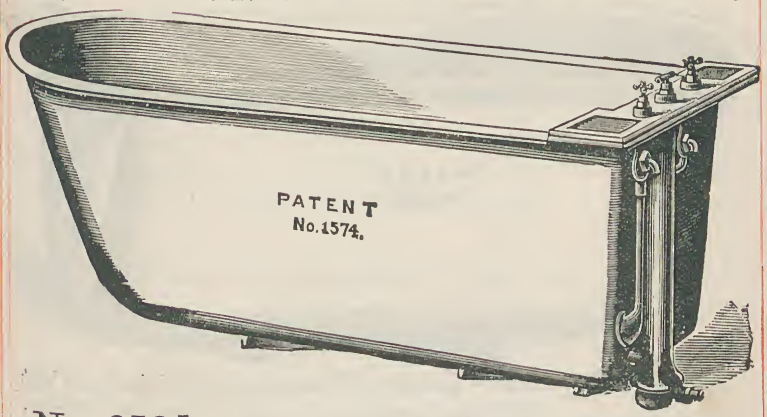
No. 250b.—Patent "Citizen" Bath, as above, but with flat rim, requiring wood casing.

	Japanned.	Enamelled. 2nd finish.	Enamelled. Best finish.
5-ft. Taper	£2 17 6	£4 0 0	£4 15 0
5-ft. 6-in. Taper ...	3 0 0	4 4 0	5 0 0
5-ft. 6-in. Parallel ...	3 5 6	4 11 6	5 8 0
6-ft. Taper	3 6 0	4 12 0	5 10 0
6-ft. Parallel	3 12 0	5 0 0	5 19 0

Nickel-plated fittings, 3/0 extra.
Adjustable trap above floor-line, 1/6 extra.

No. 250c.—The "Europa" Steamless and Noiseless Cast Iron Bath, on ornamental feet, to stand without wood casing, grained or marbled outside, with hot, cold, and waste fittings, and with handsome walnut, or mahogany capping.

	Japanned.	ENAMELLED. 2nd Finish.	Best Finish.	Porcelain.
5-ft.	£5 18 6	£7 4 0	£8 0 0	£9 17 0
5-ft. 6-in. ...	6 5 0	7 10 0	8 7 0	10 11 0
6-ft.	6 17 0	8 7 0	9 6 0	11 14 0

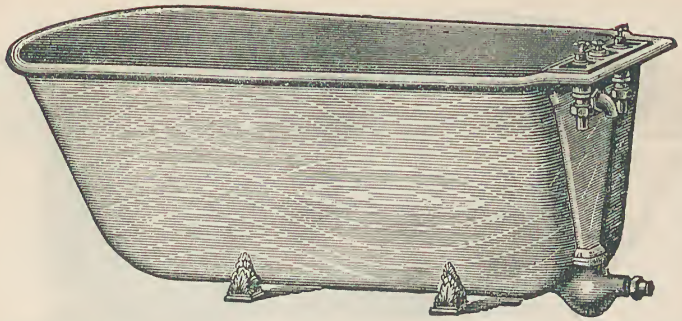


No. 250d.—The "Europa" Cast Iron Bath, as above, but for wood enclosure.

5-ft.	£3 17 6	£4 17 6	£5 15 0	£7 12 6
5-ft. 6-in. ...	4 2 0	5 5 0	6 0 0	8 5 0
6-ft.	4 14 0	6 0 0	7 0 0	9 7 0

Nickel plated fittings, 5/0 extra.

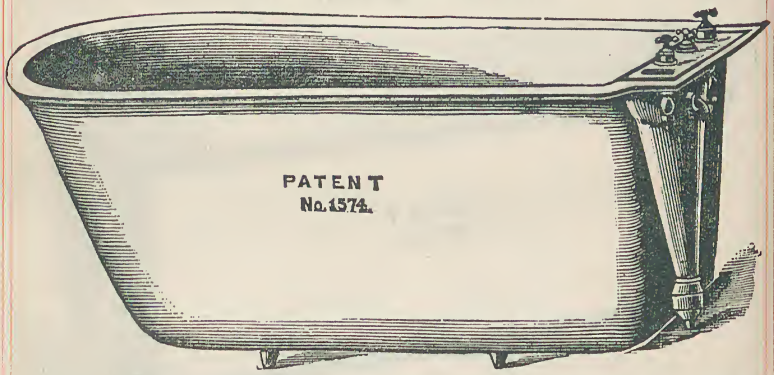
The valves in the above baths are easy of access without removing woodwork.



No. 250e.—The "Leander" Steamless and Noiseless Cast Iron Bath, on ornamental feet, grained or marbled outside, to stand without wood enclosure, with hot, cold, and waste fittings, with rolled edge.

	Japanned.	ENAMELLED. 3rd Finish.	2nd Finish.	Best Finish.
5-ft.	£4 7 6	£4 10 6	£5 12 6	£6 10 0
5-ft. 6-in. ...	4 9 0	4 12 0	5 17 0	6 15 0
6-ft.	5 0 0	5 4 0	6 9 0	7 7 0

Nickel plated fittings, 5/0 extra.

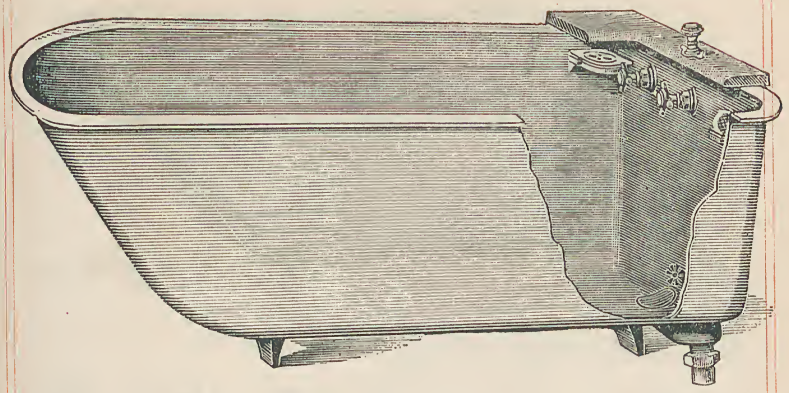


No. 250g.—The "Leander" Steamless and Noiseless Cast Iron Bath, with hot, cold and waste fittings, with flat rim for wood enclosure.

5-ft.	£3 5 6	£3 7 6	£4 7 6	£5 5 0
5-ft. 6-in. ...	3 6 8	3 10 0	4 12 6	5 10 0
6-ft.	3 17 0	4 0 0	5 2 0	6 0 0

Nickel plated fittings, 5/0 extra.

The valves in the above baths are easy of access, and can be repaired without removal of woodwork.



No. 250h.—The "Compactum" Steamless and Noiseless Cast Iron Bath, with hot, cold, and waste fittings, and earthenware soap cups, for wood enclosure, occupies the same space as an ordinary bath without fittings.

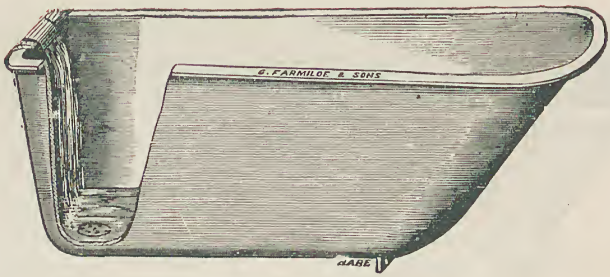
			ENAMELLED.	
	Plain Painted.	Japanned.	2nd Finish.	Best Finish.
5-ft. ...	£2 12 0	£2 16 0	£3 18 6	£4 14 0
5-ft. 6-in.	2 14 0	2 19 0	4 3 0	5 0 0
6-ft. ...	2 19 0	3 5 0	4 12 0	5 10 0

Nickel plated fittings, 5/0 extra.

No. 250j.—"The Compactum" Cast Iron Bath, with moulded wood coping, on ornamental feet, grained or marbled outside, requiring no enclosure, fitted with waste valve only, and with special inlet for use in connection with gas heater.

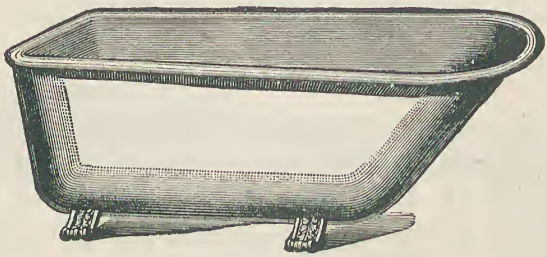
5-ft.	£4 6 0	£5 8 6	£6 4 0
5-ft. 6-in. ...	4 9 0	5 13 0	6 10 0
6-ft.	5 0 0	6 7 0	7 6 0

Nickel plating waste pull, 1/6 extra.



No. 251.—Cast Iron Bath.

	5-ft.	5-ft. 6-in.	6-ft.
Plain Painted ... ... each	24/0	25/0	33/6
Japanned Sienna or White ... ... ,,	26/9	29/6	36/0
Enamelled Sienna or White, second finish ,,	50/0	53/6	63/6
Ditto, best finish ... ... ,,	63/6	67/0	80/0



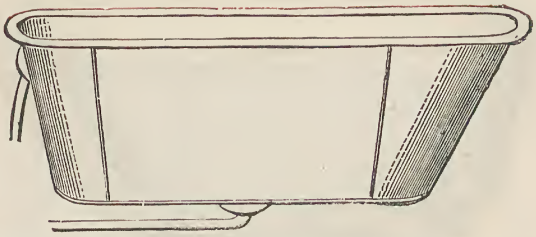
No. 251a.—Cast Iron Bath, rolled edge, to stand without wood casing.

	5-ft.	5-ft. 6-in.	6-ft.
Japanned Sienna or White ... ... each	42/0	47/0	56/0
Enamelled ,, ,, second finish ,,	65/0	71/0	83/6
,, ,, ,, best finish ,,	78/6	84/6	100/0

No. 252.—Clark's Porcelain Enamelled Cast Iron Baths.

No.	Inside measure.						Each.		
2036	70×28×24-in.	deep at narrow end,	with	2-in.	black	flange ...	£8	0	0
2056	66×24×20-in.	,, ,, ,,		1⅜-in.	,,	...	7	5	0
196	63×27×22-in.	,, ,, ,,		1¾-in.	,,	...	7	0	0
1973	63×27×22-in.	,, ,, ,,		1½-in.	,,	...	6	15	0
865	60×24×20-in.	,, ,, ,,		1½-in.	,,	...	6	10	0
1041	48×24×18-in.	,, ,, ,,		1½-in	,,	...	5	10	0

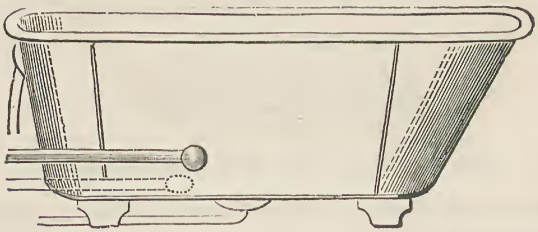
No. 1973 bath has a narrower bottom than No. 196.



No. 253.—Taper Bath, without feet, flat rim, with 1-in. copper pipe, copper well and 1-in. copper overflow, Japanned white marble inside only.

		5-ft.	5-ft. 3-in.	5-ft. 6-in.
Copper	each	£8 10 0	£9 6 0	£9 12 0
Tinned Iron	„	3 0 0	3 3 0	3 6 0
Galvanized Iron	„	2 16 0	2 18 0	3 0 0
Extra Thick Zinc	„	3 9 0	3 12 0	3 15 0
Strong Zinc	„	2 17 0	3 0 0	3 3 0
Light „	„	2 10 0	2 13 0	2 16 0

With Beaded Edge at same prices, on Feet 10/0 extra.

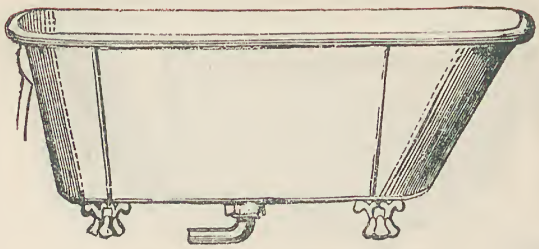


No. 254.—Taper Bath, on feet, flat rim, three 1-in. copper pipes, copper well, and 1-in. copper overflow, Japanned white marble inside.

		5-ft.	5-ft. 3-in.	5-ft. 6-in.
Copper	each	£9 10 0	£10 0 0	£10 10 0
Tinned Iron	„	4 0 0	4 3 0	4 6 0
Galvanized Iron	„	3 16 0	3 18 0	4 0 0
Extra Strong Zinc ...	„	4 5 0	4 10 0	4 15 0
Strong Zinc	„	3 15 0	3 19 0	4 2 0
Medium „	„	3 0 0	3 12 6	3 15 0

Not Japanned, 9/0 less. Polished, 12/0 extra.

When ordering, please say whether Pipes are to run to Head or Foot of Bath.



No. 255.—Taper Bath, on ornamental feet, beaded edge, japanned white marble inside, and oak graining outside, with copper overflow at foot, and washer and plug, with bent union at bottom.

		5-ft.	5-ft.3-in.	5-ft.6-in.
Tinned iron	... each	£3 10 0	£3 15 0	£3 19 0
Extra strong zinc	„	4 4 0	4 7 0	4 10 0
Strong zinc... ...	„	3 10 0	3 13 0	3 15 0
Light „	„	3 0 0	3 2 6	3 5 0

Not japanned, 12/0 less.
Polished inside, 12/0 extra.
With flat rims, at same prices.

Note respecting baths, 253, 254, and 255.

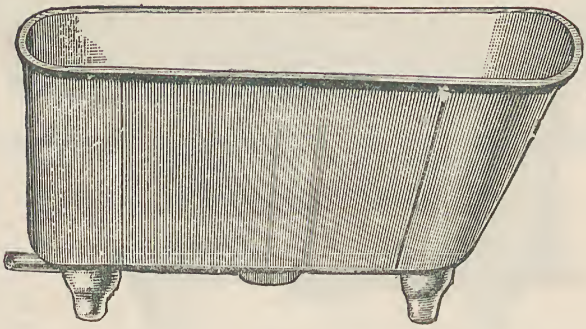
Copper Baths have 1¾-lbs. to foot in sides and bottom, and 1½-lbs. to the foot in ends.

Tinned Iron and Galvanized Iron Baths have 22 gauge in sides and bottom, and 24 gauge in ends.

Extra thick Zinc Baths have 16 B W gauge in sides and bottom, and 16 zinc gauge in ends.

Strong Zinc Baths have 16 gauge zinc in sides and bottom, and 14 gauge in ends.

Light Zinc Baths have 14 gauge in sides and bottom, and 12 gauge in ends. Though these may sometimes answer for cold water (and many baths are sold of still lighter materials), we do not recommend them, except for temporary purposes.



No. 255a.—The "Albion" Copper Bath, with flanged top for fixing in wood casing. Made of hardened copper.

The sides weighing 28-ozs. to the superficial foot; the bottom, 32-ozs. to the foot; the ends (where the curve adds to the strength), 24-oz. to the foot. Total weight, 65-lbs. of copper.

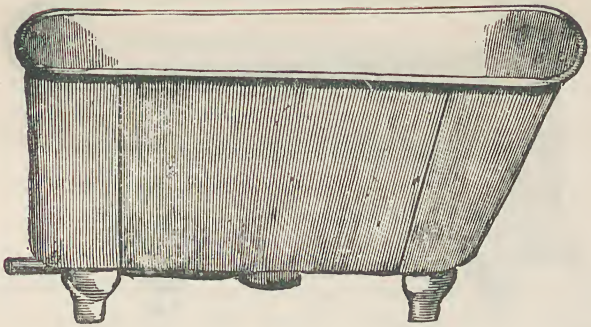
Sizes—Length, 66-in. inside, 69-in. outside flange; width, 24½-in. at head, 20-in. at foot inside flange; depth, 21-in. inside, 27-in. high from floor.

JAPANNED INSIDE (SIX COATS) AND WELL HARDENED.

With well in centre of bottom, and 1½-in. diameter pipe for connection, with any fittings ... ... each	£7	10	0
With 3 pipes for hot, cold, and waste connections and overflow ... ... each	8	10	0
Without pipe, hole in bottom only for connection to cast-iron fittings ... ... each	7	3	0
With copper bead at top instead of flat flange and japanned coloured marble outside ... ... each	8	7	6
With polished mahogany bead and coloured marble outside ,,	10	10	0

EXTRAS.

Hand polishing ... ... each	0	12	0
Sienna marbling ... ... ,,	0	10	0



No. 255b.—The "Atlas" Steel and Copper Bath.

The sides of steel plates (tinned), No. 20, B. W. G.

The ends of steel plates (tinned), No. 22, B. W. G.

The bottom of hardened copper, 32-ozs. to the superficial foot.

Length, 66-in. inside, 69-in. outside flange.

FLANGED FOR CASING—JAPANNED WHITE, PINK, OR SEA GREEN—

With copper well and 1½-in. copper pipe for connection with any fittings ... ... each	£4	10	0
With three pipes for hot, cold, and waste connections and separate overflow ... each	5	5	0
Without any pipes, hole in bottom only for connection with cast iron fittings ... each	4	3	0

EXTRAS.

Rolled edge and japanned marble outside ... ... each	0	10	0
Polished mahogany top ... ... ,,	2	10	0
Hand polishing ... ... ,,	0	12	0
Sienna marbling ... ... ,,	0	10	0

The introduction of a copper bottom removes the one objection to the use of steel plates for baths, namely the danger of rust. The mischief usually occurs in the bottom of the bath through the water being imperfectly drained off.

No. 256.—Long Bath, without Back (equal ended).

FOR CHILDREN.

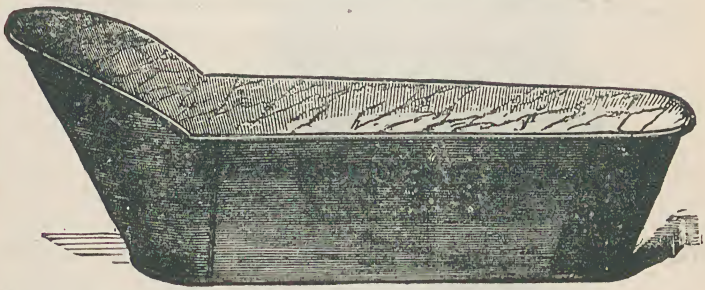
Long.	Wide.	Deep.	Tinned Iron.	Thick Zinc.	Copper.
2-ft. 0-in.	15-in.	10-in.	11/0	9/6	31/0
2-ft. 6-in.	16-in.	11-in.	14/6	13/0	40/0
3-ft. 0-in.	17-in.	12-in.	16/0	15/0	47/0
3-ft. 6-in.	18-in.	13-in.	20/0	18/0	57/0

Not japanned, 3/0 less; polished, 3/0 extra; ornamented, 5/0 extra.

FOR ADULTS.

Long.	Wide.	Deep.	Tinned Iron.	Thick Zinc.	Copper.
4-ft. 0-in.	20-in.	13-in.	23/0	21/0	67/0
4-ft. 6-in.	22-in.	14-in.	27/0	25/0	77/0
5-ft. 0-in.	23-in.	16-in.	32/0	28/0	90/0
5-ft. 6-in.	25-in.	18-in.	36/0	33/0	104/0

Not japanned, 5/0 each less; polished, 8/0 each extra.



No. 257.—Long Bath, with Back (Taper).

FOR CHILDREN.

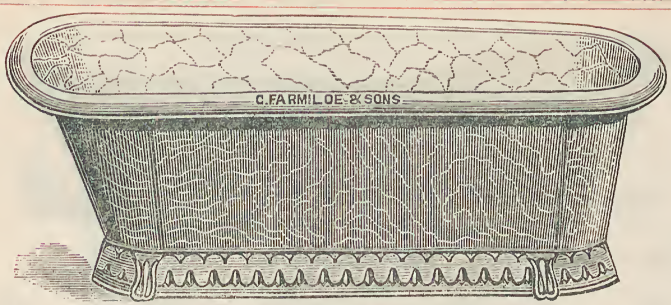
Long.	Wide at Head.	Wide at Foot.	Deep.	Tinned Iron.	Thick Zinc.	Copper.
2-ft. 0-in.	13-in.	10-in.	9-in.	12/0	10/6	34/0
2-ft. 6-in.	15-in.	11-in.	10-in.	15/6	14/0	44/0
3-ft. 0-in.	16-in.	12-in.	11-in.	18/6	17/0	53/0
3-ft. 6-in.	16-in.	14-in.	12-in.	21/0	19/6	61/0

Not japanned, 3/0 less; polished, 3/0 extra; ornamented, 5/0 extra.

FOR ADULTS.

Long.	Wide at Head.	Wide at Foot.	Deep.	Tinned Iron.	Thick Zinc.	Copper.
4-ft. 0-in.	20-in.	17-in.	13-in.	25/0	23/0	72/0
4-ft. 6-in.	21-in.	19-in.	14-in.	28/0	26/6	86/0
5-ft. 0-in.	23-in.	20-in.	16-in.	33/0	30/0	96/0
5-ft. 6-in.	24-in.	22-in.	18-in.	39/0	35/0	112/0

Not japanned, 5/0 each less; polished, 8/0 each extra.



No. 258.—Roman Bath. Round ended, with pitched bottom, and fret round feet, japanned white marble inside, and oak outside.

		5-ft. long inside.	5-ft. 6-in. long inside.
Tinned iron ...	each	£7 10 0	£8 12 0
Tinned copper...	,,	14 14 0	16 16 0
Extra thick zinc	,,	8 15 0	9 10 0

Pipes or fitting extra, if required.

Japanned sienna marble inside, and green marble outside, 25/0 extra.

No. 259.—Porcelain Bath, glazed white inside, outside measure.

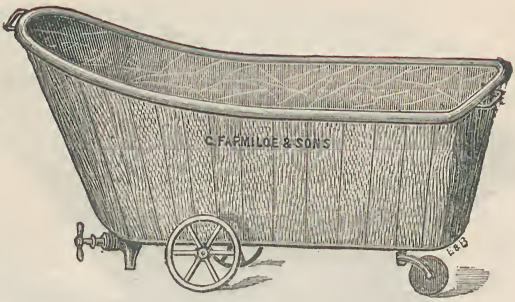
	Length.	Width at head.	Width at foot.	Depth.
No. 1 ...	5-ft. 7-in.	2-ft. 6-in.	2-ft. 0-in.	1-ft. 11-in.
		1st class.	2nd class.	3rd class.
Each ...		£8 12 6	£7 12 6	£6 12 6
,, 2 ...	6-ft. 1-in.	2-ft. 6 in.	1-ft. 10-in.	1-ft. 11-in.
Each ...		£10 7 0	£9 7 0	£8 7 0

No. 259a.—Square-headed Porcelain Baths.

	Length.	Width at head.	Width at foot.	Depth.
No. 3 ...	5-ft. 3-in.	2-ft. 4-in.	2-ft. 0-in.	1-ft. 11-in.
		1st class.	2nd class.	3rd class.
Each ...		£8 12 6	£7 12 6	£6 12 6

The 2nd and 3rd class baths are made and finished in the same way as the 1st class, but are more or less damaged in process of manufacture.

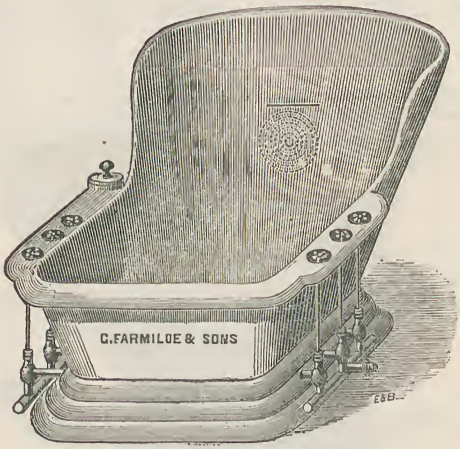
Cutting holes in either of the above, 3/6 each.



No. 260.—Hospital Bath.

Made in strong Tinned Iron, with beaded edge, Japanned inside and out. On wheels, with India-rubber tyres, and 1-in. discharge cock.

5-feet long	each	£5	15 0
5-feet 6-inches long	„	6	0 0



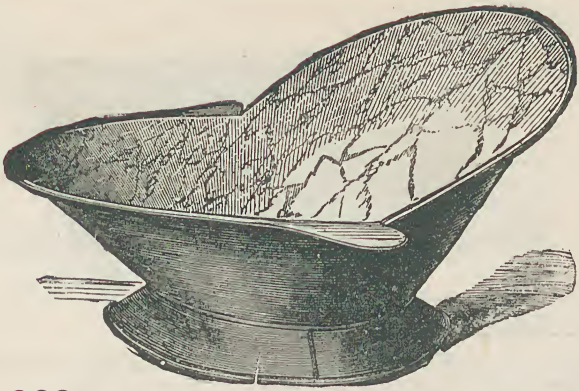
No. 261.—Sitz Bath.

With bottom shower, back shower, and back wave, fitted with taps for hot and cold water to each, with waste pull and standing waste.

This is an invaluable appliance for ladies and invalids, and is highly recommended by the Medical profession.

With Taps complete, Japanned inside and out—

Copper	each	£12	10 0
Zinc	„	8	10 0



No. 262.—Oxford Hip Bath, hollowed bottom and arm rests. Best quality.

No.	Long.	Wide.	High at Back.	High in Front.	Tinned Iron.	Thick Zinc.	Copper.
1	42-in.	27-in.	24-in.	17-in.	29/6	25/0	84/0
2	39 ,,	25 ,,	22 ,,	15 ,,	26/0	22/0	77/0
3	36 ,,	23 ,,	21 ,,	13 ,,	23/0	19/0	69/0
4	32 ,,	20 ,,	16 ,,	12 ,,	20/0	17/0	62/0

Not Japanned, 6/0 each less. Japan polished, 6/0 each extra. Japanned in coloured marble, or ornamental, 6/0 to 12/0 extra, according to pattern.

No. 263.—Athenian Hip Bath, hollowed bottom and arm rests.

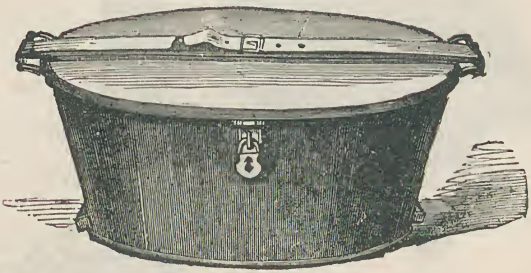
No.	Long.	Wide.	High at Back.	High in Front.	Tinned Iron.	Thick Zinc.	Copper.
1	36-in.	25-in.	24-in.	13-in.	26/0	22/0	75/0
2	34 ,,	23 ,,	22 ,,	12½ ,,	23/0	20/0	67/0
3	32 ,,	22 ,,	21 ,,	12 ,,	21/0	18/0	60/0
4	28 ,,	19 ,,	19 ,,	11 ,,	19/0	16/0	56/0

Not Japanned, 5/0 each less. Japan polished, 5/0 each extra. Japanned in coloured marble, or ornamental, 5/0 to 10/0 extra.

No. 264.—Sponge Bath, with bead inside to prevent splashing. Best quality.

	Dia. at top.	Depth.	Tinned Iron.	Tinned Zinc.	Copper.
No. 1.	3-ft. 6-in.	6-in.	21/0	19/0	58/6
„ 2.	3-ft.	6-in.	19/0	17/6	54/0
„ 3.	2-ft. 8-in.	6-in.	17/6	16/0	49/0
„ 4.	2-ft. 4-in.	6-in.	16/0	14/6	45/0

When made in zinc the bead is a whole tube; in iron or copper, an open astragal.

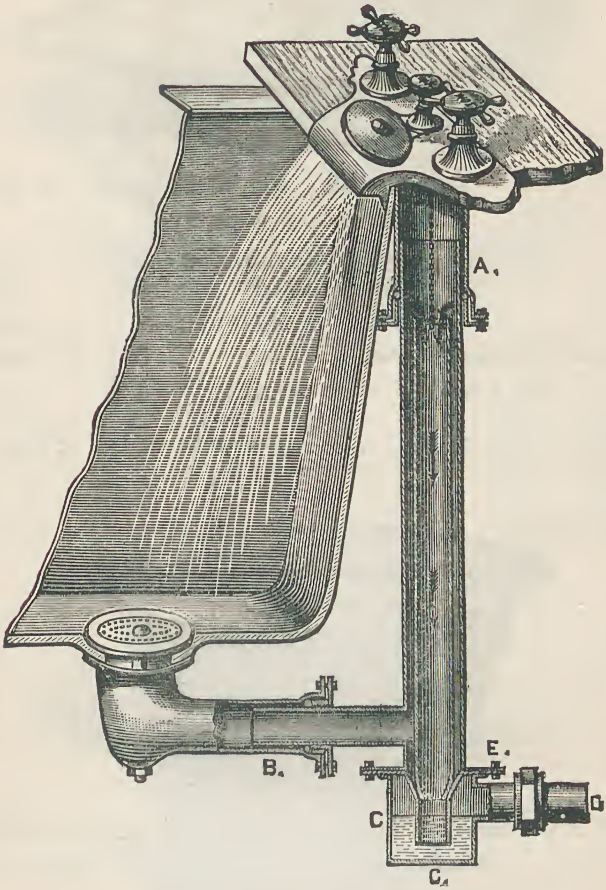


No. 265.—Travelling Bath, with flat top, with lock on cover included, or made to order, with padlock, as in illustration, padlock extra.

No. 1.	36-in. long	each	£1	17	0
„ 2.	32-in. „	„	1	13	0
„ 3.	27-in. „	„	1	8	0
„ 4.	24-in. „	„	1	5	0

The above requires a leather strap to secure the lid.

BATH APPARATUS.

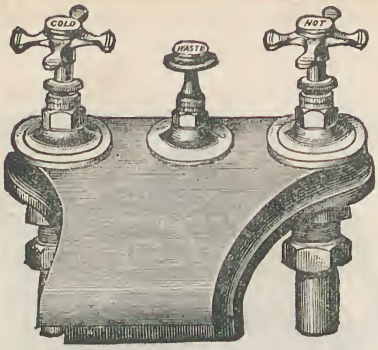


No. 266.—Shank's Bath Fittings, for hot, cold, and waste, with discharge valve and trapped overflow pipe, complete.

Each $\frac{3}{4}$-in. 22/6 1-in. 24/0

EXTRAS.

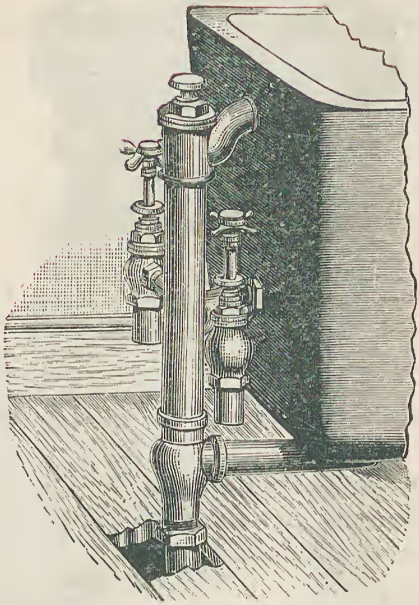
Electro Plated...	each	10/0
Nickel ,, ...	,,	5/0



	¾-in.	1-in.	Nickel plated extra.
No. 266a.—Brass Bath Fittings for hot, cold, and waste, without discharge pipe ...	11/6	13/0	5/0
Gun metal ditto, extra heavy ...	21/6	26/6	5/0
No. 266b.—Brass Bath Fittings FOR PORCELAIN BATHS, hot, cold, and waste, without discharge pipe	20/0	24/0	6/0
Gun metal ditto, extra heavy ...	22/6	27/6	6/0
No. 266c.—Brass Bath Fittings for hot and cold only, without discharge pipe	9/6	11/0	4/0
Gun metal ditto, extra heavy ...	18/6	22/6	5/0
No. 266d.—Brass Bath Fittings for cold and waste only, without discharge pipe ...	9/0	12/0	4/0

EXTRA.

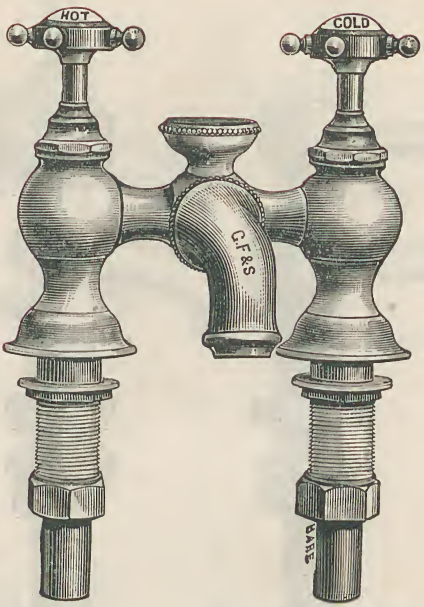
Discharge pipes for either of the above in cast iron, trapped, and with brass grating ... ... each	11/0



No. 266e.—Brass Bath Fittings to attach to Porcelain Bath, for hot, cold, and waste, with cast-iron discharge pipe ... ... each £1 18 6

No. 266g.—Bath Fittings as above, but made entirely of brass ... each 3 17 6

These fittings can be made with loose keys, so that only the attendant can work the taps, this arrangement is very suitable for asylums.

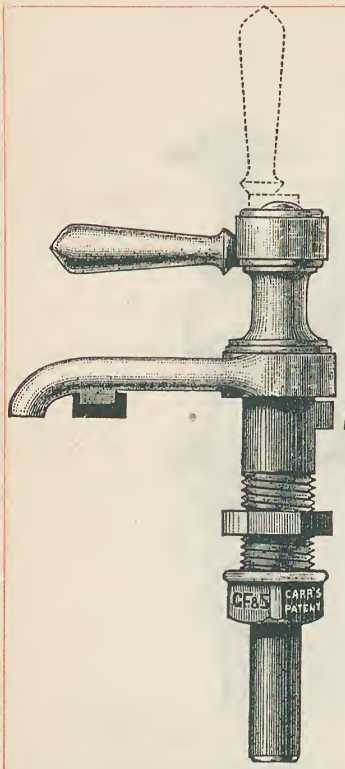


No. 267.—American Double Bath Valve, with jewel cup, for hot and cold supply.

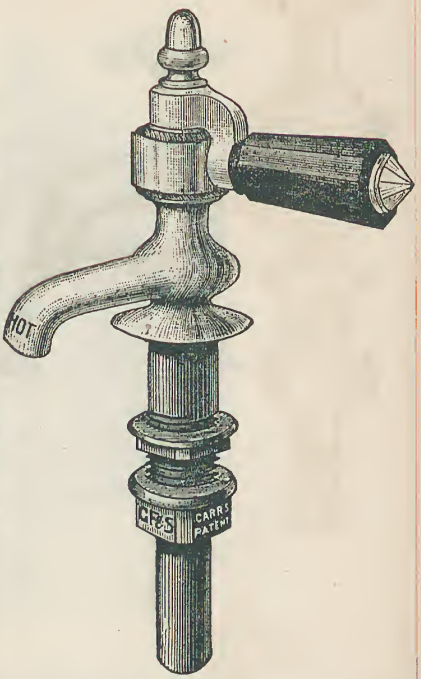
Gun metal	each	£1 10 0
Ditto, nickel plated	„	1 19 0

These are highly finished, and warranted to stand high pressure and hot water.

Fibre Discs for repairing above, 1/6 per dozen.



No. 267A.



No 267B.

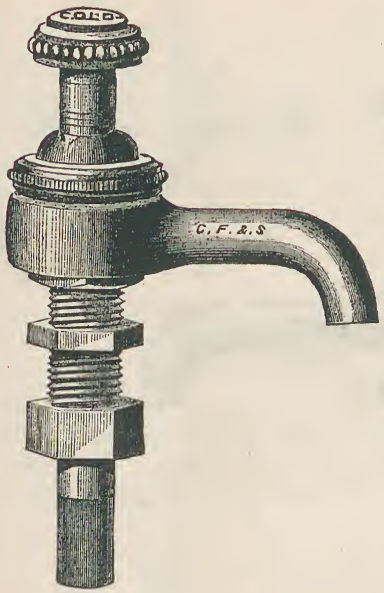
No. 267a.—GEORGE FARMILOE & SONS' Bath and Lavatory Valves.

		⅜-in.	½-in.	¾-in.	1-in.
Brass	each	6/0	6/6	10/6	17/6
Electro Plated	,,	8/0	9/0	13/6	21/0

No. 267b.—GEORGE FARMILOE & SONS' Quarter-Turn Bath and Lavatory Valves, with ebony levers.

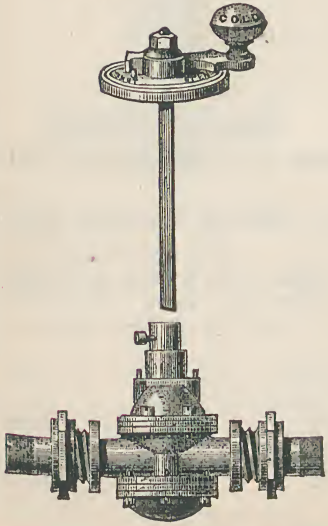
		⅜-in.	½-in.	¾-in.	1-in.
Brass	each	9/0	11/0	16/6	21/0
Electro Plated	,,	11/0	13/6	19/6	24/6

Marked either "Hot" or "Cold," and made either right or left hand.



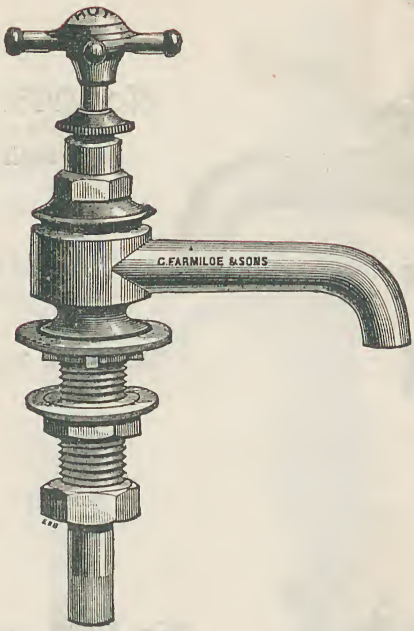
No. 268. — Diaphragm Bath Valve (strong pattern), for hot or cold supply.

Each, ¾-in. 10/6, 1-in. 15/0



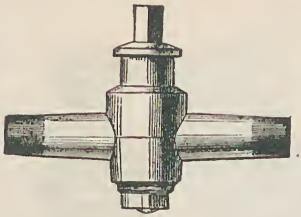
No. 269.—Diaphragm Bath Valve, for either hot, cold, or waste, with ornamental lever and plate, china knob, iron spindle, and union at each end, complete.

1-in. ... ... each 23/0



No. 0268.—George Farmiloe & Sons' Improved Gun Metal Screw-down Bath or Lavatory Valve, for hot or cold water, with fly nut and union complete.

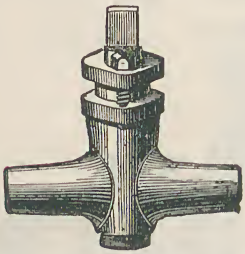
	½-in.	¾-in.	1-in.
Each	4/0	7/6	12/6
Ditto electro-plated	6/6	10/6	16/0



No. 270.—Roundway Bath Cock.

Screw bottom.

	¾-in.	1-in.	1¼-in.
	5/3	11/6	17/6
With union at one end	7/3	13/0	20/0
Ditto, at both ends	9/3	15/0	23/0



No. 271.—Improved Gland Bath Cock.

With solid bottom, warranted not to leak or set fast.

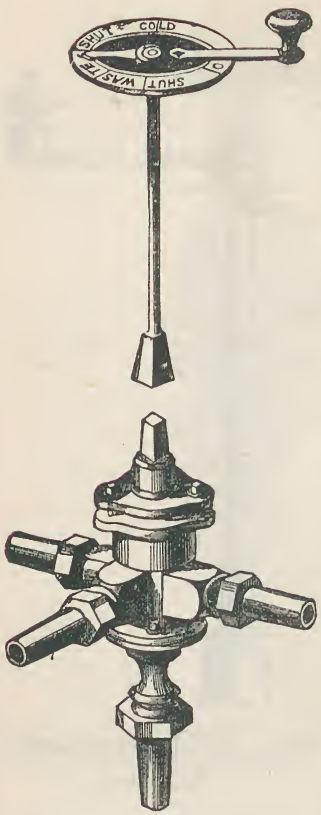
	¾-in.	1-in.	1¼-in.
	7/6	14/0	22/0
With union at one end	9/6	16/0	25/0
Ditto, at both ends	11/6	18/0	28/0

No. 272.—Ornamental Bath Lever.

Engraved, with socket and spindle.

Each ¾-in. 7/0 1-in. 9/0

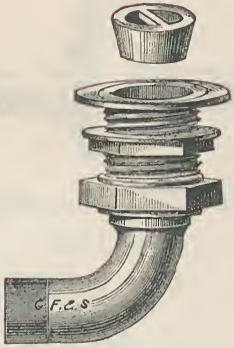
No. 272A.—Iron Socket Key only 3/0 each.



No. 273.—Four-way Bath Cock.

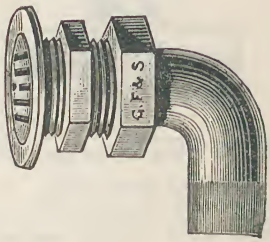
With unions, index-plate, lever socket and spindle, complete.

1-in. ... ... each 55/0



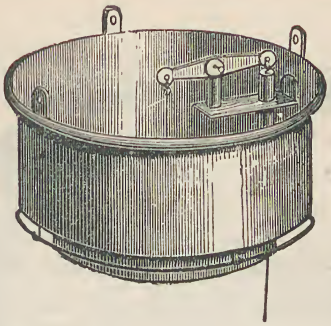
No. 274.—Bath Washers and Plugs, with fly nut and union.

		1¼-in.	1½-in.
Best ...	each	5/0	6/0
Seconds	,,	3/0	4/0



No. 275.—Bath Overflow.

	1¼-in.	1½-in.
With fly nut and bent union, ea.	3/0	4/0



No. 276.—Shower Bath.

With valve lever and iron band for curtain.

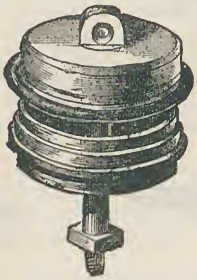
Best Copper ... ... each	77/6	Galvanized Iron ... each	56/0
Seconds do. ... ... „	69/0	Seconds do. ... „	39/0

No. 277.—Shower Bath Pump.

2½-in., with valve in bottom ... ... each 15/6

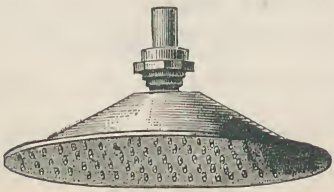
No. 278.—Improved Shower Bath Pump.

With suction and delivery valves, unions for suction and delivery pipe, with flange for fixing, &c., complete ... ... each 45/6



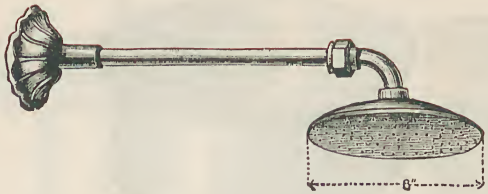
No. 279.—Shower Bath Valve.

2-in., 2/9; 2½-in., 3/9; 3-in., 5/0; 3½-in., 7/6; 4-in., 11/0 each.



No. 280.—Shower Rose.

Tinned Copper, with Union ... ... each 21/0

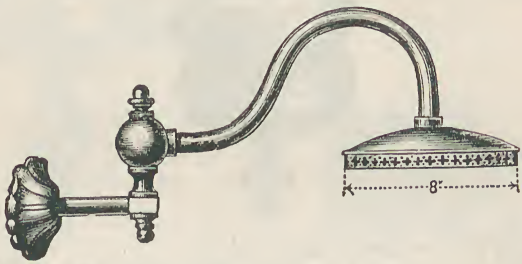


No. 280a.—Bracket Shower in brass, with malleable iron tube and cast iron wall plate, brass bend and connection... ... ... each £1 2 6

No. 280b.—Ditto in copper, with copper tube and brass wall plate ... each 1 10 0

EXTRA.

If fitted with screw-down valve, lever and weight, handle and chain, No. 280A. ... ... each	0	5	6
Ditto. 280B. ... ... „	0	8	0



No. 280c.—Bracket Shower, with swivel joint in brass, with brass tube and cast iron wall plate ... ... each £1 15 0

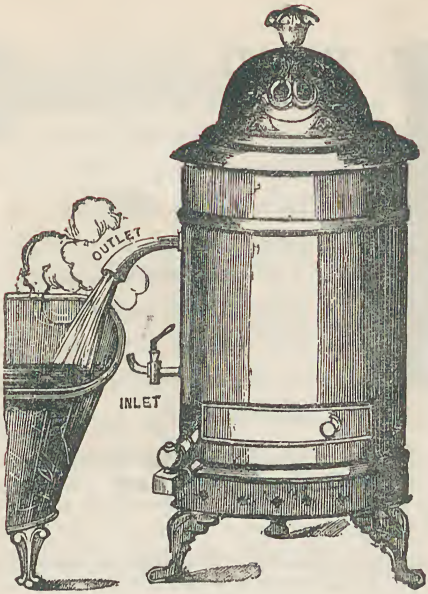
No. 280d.—Ditto in copper, with copper tube and brass wall plate... each 1 19 6

Nickel plating shower only ... ... each	0	4	0
„ „ complete bracket ... ... „	0	6	0

No. 281.—The "Lightning Geyser," unattached to bath, adapted for fixing in any position and for any purpose where a supply of pure hot or boiling water is required instantly. In five sizes, made throughout of copper and brass. The inside surfaces which come in contact with the water are carefully tinned. The outside is polished and lacquered, or if preferred may be japanned any desired colour.

No. 1.—Heats enough water for a full-sized Bath, thirty gallons, to 100 degrees in 5 minutes (in winter 8 minutes). Produces boiling water (212°) at the rate of a gallon per minute	£10 10 0
No. 2.—Heats the same quantity in 8½ minutes (in winter 14 minutes). Boiling water at 3 quarts a minute ...	8 8 0
No. 3.—Heats the same quantity in fifteen minutes (in winter 25 minutes). Boiling water at 2 quarts a minute ...	6 6 0
These three sizes are most in demand for baths, and have burners which swing out for lighting, as shown in diagram.	
No. 4.—Supplies hot water (100 degrees) at the rate of 5 gallons to 8 gallons a minute, or boiling water at the rate of 5 quarts to 6 quarts per minute, and is adapted for schools, hospitals, factories and large establishments	12 12 0
No. 5.—Suitable for a bedroom or lavatory. Warms water to bath heat at the rate of a gallon a minute, or to boiling at the rate of a quart a minute	4 4 0
In all the above the water is warmed or boiled as it passes through carefully tinned copper chambers, and is thus kept quite pure and fit for drinking.	
No. 7.—Is constructed on a different principle, similar to that of the original Geysers. The water is warmed to bath heat (not to boiling) by contact with the products of the gas, and is suitable for baths or domestic use, but not for cooking or drinking. Will supply a hot bath in from 10 minutes to 15 minutes. Made of copper throughout	5 0 0

Nos. 4, 5, *and* 7 *have fixed burners.*



THE "CALDA" WATER HEATER, JAPANNED GREEN MARBLE AND GOLD.

No. 283.—The "Dwarf" will give a warm bath, 20 to 25 gallons, in 20 minutes £4 10 0

No. 282.—Will give a warm bath, 20 to 25 gallons, in 15 minutes 6 10 0

No. 282a.—Will give a warm bath, 20 to 25 gallons in 10 minutes 8 10 0

ADVANTAGES OF "THE CALDA."

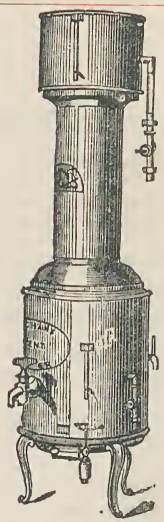
1st.—The water does not come in contact with the gas, and is, therefore, perfectly pure when heated.

2nd.—The interiors are made of tinned copper, enclosed in strong outer cases, to prevent loss of heat.

3rd.—The burners swing out for convenience in lighting, thus preventing possibility of accidents.

4th.—The cold water inlet is at bottom, and hot water outlet at top of Calda, so that it always remains full, and removes risk of injury if gas is lighted before turning on the water.

N.B.—All Caldas made handed, and are free from smoke or smell.



No. 284.—MAUGHAN'S Patent Geyser, Class A.

No. 285.—MAUGHAN'S Patent Geyser, Class B.

The Patent Geyser attains the following most important results:

(1) An unprecedented saving of time and fuel. (2) It obviates the necessity and expense of maintaining a supply of hot water, in order to avoid the loss of time hitherto required to heat cold water. (3) It removes the danger of bursting incident to steam-tight hot water pipes and boilers—because there are no confined spaces within it. (4) It is durable—being so constructed that the heat of the gas has less injurious effect upon the metal than in any other apparatus. (5) It is simple, and cannot immediately be be put out of order by mistakes in using it. (6) It never fails to do its work, and can always be depended upon, however great the emergency, as in cases of accident, or sudden illness. (7) It is comparatively inexpensive to fit up. (8) It is not affected by saline deposit. (9) It is equally useful to fill a jug or pail, or to supply 40 or 50 gallons for a bath, or for larger quantities of hot or boiling water as may be required. (10) It heats the water immediately to any heat required up to boiling. (11) It may be put either in or out of action with great ease and facility. (12) The instantaneous heating is not due to the consumption of an excessive amount of gas, but to the arrangement of the water into numerous streams, which enables it to receive heat with such rapidity and economy, that it is not fully credited until actually witnessed. (13) Owing to the special construction of the burner there is no smell or annoyance of any kind.

For Prices, see next pages.

No. 284. *Class A.*

No. 1a Patent Geyser.

Heats per Minute,

3 quarts of cold water to 100°, or 1 pint to boiling, or produces

A Warm Bath in 40 minutes at 90°, *in Temperate weather.*

Price (manufactured in Galvanized Iron) with taps and unions complete ... ... each £7 10 0

With Copper interior, extra ... ... each 0 15 0

No. 2a Patent Geyser.

Heats per Minute,

One gallon of cold water to 100°, or 1½ pints to boiling; or produces

A Tepid Bath in 20 minutes, at 80°

A Warm Bath in 30 minutes, at 90°

A Hot Bath of 40 galls., at 100°, *in*

Summer in 28 minutes, for 1d.

Temperate weather in 40 minutes, for 1½d.

Freezing weather in 68 minutes, for 2½d.

Price (manufactured in Galvanized Iron) with taps and unions complete ... ... each £10 10 0

With Copper interior, extra ... ... each 1 0 0

No. 3a Patent Geyser.

Heats per Minute,

Two gallons of cold water to 100°, or 3 pints to boiling; or produces

A Tepid Bath in 10 minutes, at 80°

A Warm Bath in 15 minutes, at 90°

A Hot Bath of 40 galls., at 100°, *in*

Summer in 14 minutes, for 1d.

Temperate weather in 20 minutes, for 1½d.

Freezing weather in 34 minutes, for 2½d.

Price (manufactured in Galvanized Iron) with taps and unions complete ... ... each £14 10 0

With Copper interior, extra ... ... each 1 10 0

No. 4a Patent Geyser.

Heats per Minute,

3 gallons of cold water to 100°, or 4 pints boiling; or produces

A Tepid Bath in 7½ minutes, at 80°

A Warm Bath in 10 minutes, at 90°

A Hot Bath of 40 galls., at 100°, *in*

Summer in 10 minutes, for 1d.

Temperate weather in 13 minutes, for 1½d.

Freezing weather in 22 minutes, for 2½d.

Price (manufactured in Galvanized Iron) with taps and unions, complete ... ... each £18 0 0

With Copper interior, extra ... ... each 2 5 0

No. 285. *Class B.*

No. 1b Patent Geyser.

For Baths or Lavatories.

Heats per Minute.

Three quarts of cold water to 100°, or produces

A Hot Bath of 40 galls., at 100°, in Summer, in 36 minutes, for 1d.

Temperate weather, in 55 minutes, for 1½d.

Freezing weather, in 90 minutes, for 2½d.

Size: Width 8-in., height, 21-in.

Requires, at the ordinary pressure of gas, ⅜-in. iron gas supply, or ½-in. (interior measure) composition pipe. 5-light meter.

	Each.
Price (manufactured in Galvanized Iron)	£4 10 0
Ditto, Copper interior (extra)	0 15 0
5-ft. Bath, with waste plug and overflow, superior quality ...	5 0 0

No. 2b Patent Geyser.

Heats per Minute.

One gallon of cold water to 100°, or produces

A Hot Bath of 40 galls., at 100°, in Summer, in 28 minutes, for 1d.

Temperate weather, in 40 minutes, for 1½d.

Freezing weather, in 68 minutes, for 2½d.

Size: Width 10½-in., height 2-ft. 2-in.

Requires, at the ordinary pressure of gas, ⅜-in. iron gas supply, or ½-in. (interior measure) composition pipe. 5-light meter.

	Each.
Price (manufactured in Galvanized Iron)	£6 0 0
Ditto, Copper interior (extra)	1 0 0
5-ft. Bath, with waste plug and overflow, superior quality ...	5 0 0

No. 3b Patent Geyser.

Heats per Minute.

Two gallons of cold water to 100°, or produces

A Hot Bath of 40 galls., at 100°, in Summer, in 14 minutes, for 1d.

Temperate weather, in 20 minutes, for 1½d.

Freezing weather, in 34 minutes, for 2½d.

Size: Width 1-ft. 1-in., height 2-ft. 4-in.

Requires, at the ordinary pressure of gas, ½-in. iron gas supply, or ¾-in. (interior measure) composition pipe. 10-light meter.

	Each.
Price (manufactured in Galvanized Iron)	£7 10 0
Ditto, Copper interior (extra)	1 10 0
5-ft. 6-in. Bath, with waste plug and overflow, superior quality	5 10 0

No. 4b Patent Geyser.

Heats per Minute.

Three gallons of cold water to 100°, or produces

A Hot Bath of 40 galls., at 100°, in Summer, in 10 minutes, for 1d.

Temperate weather, in 13 minutes, for 1½d.

Freezing weather, in 22 minutes, for 2½d.

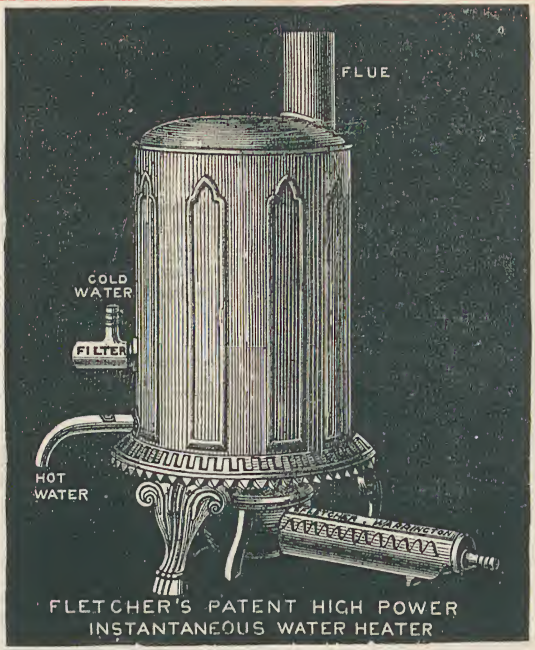
Size: Width 1-ft. 4½-in., height 2-ft. 8-in.

Requires, at the ordinary pressure of gas, ¾-in. iron gas supply, or ¼-in. (interior measure) composition pipe. 20-light meter.

	Each.
Price (manufactured in Galvanized Iron)	£10 0 0
Ditto, Copper interior (extra)	2 5 0
5-ft. 6-in Bath, with waste plug and overflow, superior quality	5 10 0

When ordering please give sketch of Bath-room, showing where Gas and Water Fittings will be most convenient.

The Geysers are kept in stock with extra Fittings, so that they can be used for a variety of purposes.



No. 285a.—Fletcher's Patent High Power Instantaneous Water Heater for Baths.

The construction is exceedingly simple; the cylinder contains a number of small jets drilled through blocks of porcelain, to prevent wear by the friction of the water. The jets of water are arranged to strike each other, forming a cloud of fine spray, which instantly takes up the heat of the burner whilst falling into the copper troughs arranged in the lower part of the cylinder, from which it flows out of the spout. There is nothing either to wear or get out of order. They will deliver water at any temperature not exceeding 130° F., *i.e.*, scalding hot, but of course in a proportionately smaller quantity.

These can now be supplied with Fletcher's Patent Safety Bunsen, which requires no projecting tube.

Both have panelled copper cylinder, planished and polished.

The filter stops any dirt which might otherwise choke the jets in the cylinder.

If these water heaters are not supplied direct from the town's service pipe, the cistern which supplies them must be at least 2½ yards above the top of the water heater cylinder, or higher if possible.

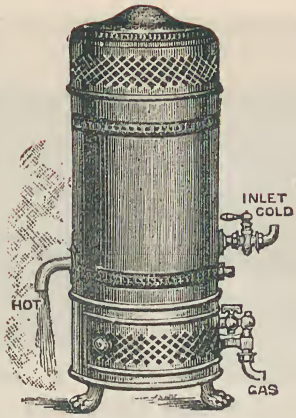
Instructions for fixing supplied with each.

Small size, complete, to heat 1 gallon per minute, from 60° to 110° 40/0

Copper pipe, for flues, tinned inside, 2/0 per foot.

Large size, to heat 2 gallons per minute, from 60° to 110° 70/0

Copper pipe, for flues, 2/6 per foot.



No. 285b.—The New Quick Hecla.

These heaters are made throughout of strong tinned copper and brass, and being handsomely japanned, marone and gold, do not tarnish or require cleaning.

ADVANTAGES.

EXPEDITION.—A small quantity of water can be produced, boiling if required, immediately, as well as a larger quantity for bath and other purposes.

PURITY.—As the water does not come in contact with the gas or its products, it is pure as supplied from the cistern, and suitable for drinking or cooking.

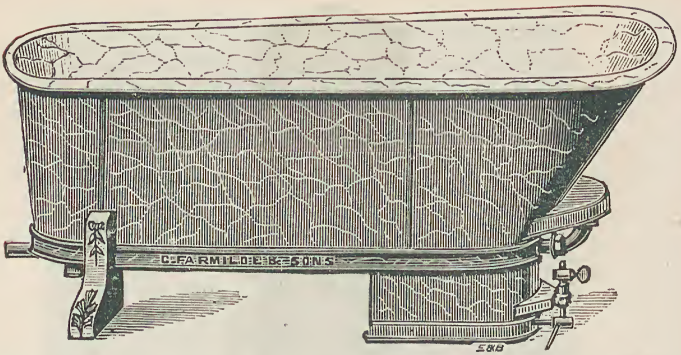
SAFETY.—As ordinary illuminating gas burners are used, there is no smell or danger, as no flue pipe is required, they may be safely fixed in any bathroom, lavatory, or other position.

UTILITY.—It can be placed over a bath without expense of connecting, and provides also a supply of hot water for any other purpose; and as the body, or upper part is loose from the stand or lower part it can be placed in any position, and without it being necessary to state right or left hand.

SIZE.

No. 2.—11½-in. diameter. Supplies a warm bath, 30 gallons, in 10 to 15 minutes. (This size recommended) .. .. each	£9	0	0
No. 1.—9½-in. diameter. Supplies a warm bath, 30 gallons, in 15 to 20 minutes ... each	7	0	0

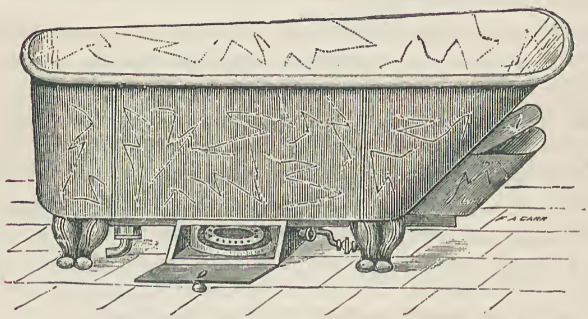
(N.B.—Summer temperature of water taken.)



No. 286.—George Farmiloe & Sons' Tinned Iron Invincible Gas Bath, with new patent heating apparatus, made entirely of copper, and so constructed as to prevent the rapid destruction of the bottom of the bath.

Japanned sienna marble inside, and green marble outside.

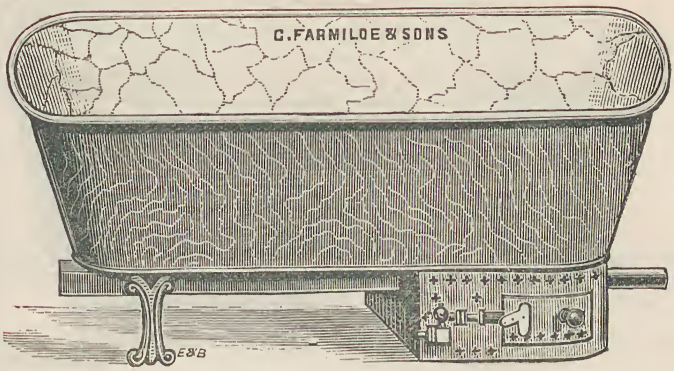
	5-ft.	5-ft. 3-in.	5-ft. 6-in.
Each	£7 10 0	£7 15 0	£8 0 0



No. 286a.—The New Villa Gas Bath, tinned iron.

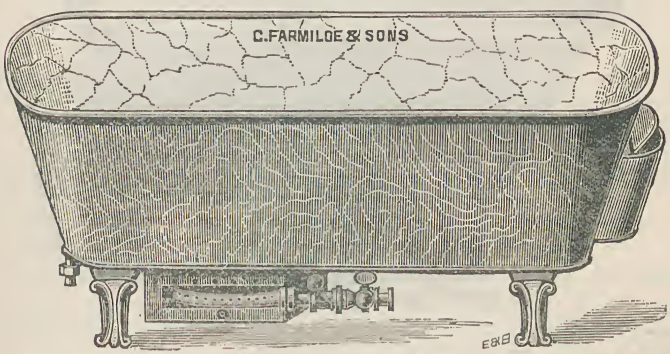
Compact and suitable to fix in any position, with copper circulating arrangement underneath, and linen airer at head ... ... each

5-ft.	5-ft. 6-in.
£5 0 0	£5 5 0



No. 289.—The Registered Universal Gas Bath, tinned iron. Right hand. Half copper bottom.

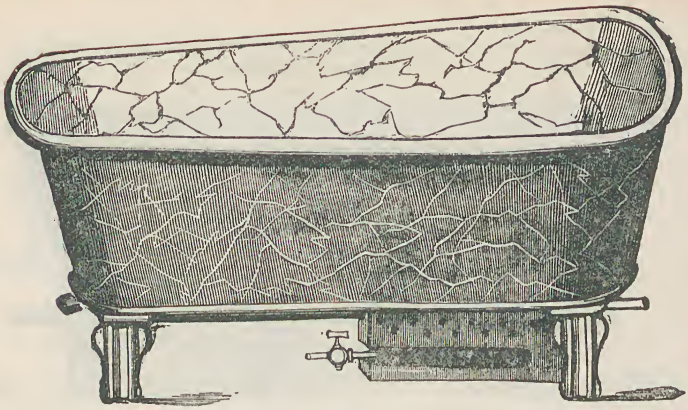
	5-ft.	5-ft. 6.in.
Japanned oak and white marble each	£6 15 0	£7 10 0
Ditto, with semi-Roman bead, and Japanned green and white marble ... ... each	— — —	9 0 0



No. 290.—The Excelsior Gas Bath, tinned iron. With linen warmer. Left hand.

	5-ft.	5-ft. 6-in.
Fitted with plug and washer, and union for waste, and japanned oak and white marble, each	£5 10 0	£6 5 0

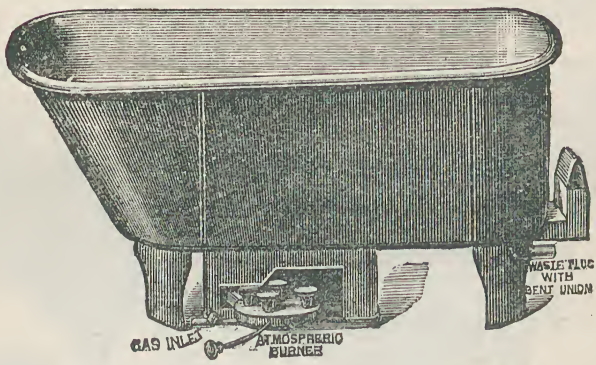
With entire copper bottom, 15/0 extra.



No. 291.—The "Marvel" Gas Bath. Right hand.

Japanned oak and white marble.

5-ft. ... ... each	£5	0	0
5-ft. 6-ins.... ... ... „	5	15	0



No. 292.—The "Turk" Gas Bath.

With copper bottom, japanned green marble outside, and white marble inside.

5-ft. ... ... each	£5	18	0
5-ft. 6-ins. ... ... „	6	14	0

If with iron bottom, 20/0 less.

No. 293.—The "Bijou" Gas Bath, with patent atmospheric burner under bottom, with linen airer at end, japanned white marble inside, and oak graining outside.

	5-ft.	5-ft. 6-in.
Tinned iron, with copper heating plate... ... each	£5 18 0	£6 10 0
Thick zinc, with copper bottom each	6 15 0	7 10 0
Copper sides and bottom ,,	9 0 0	10 10 0

No. 293a.—The "General Gordon" Gas Bath.

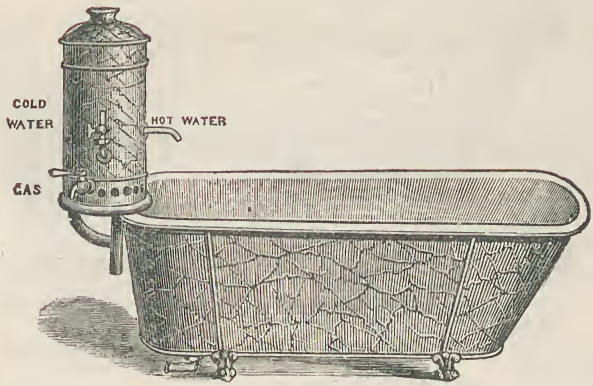
The sides made of best sheet iron, carefully tinned, and japanned inside white and outside dark oak; the bottom entirely of hardened copper.

Fitted with waste plug and loose bent union for easy connection to waste pipe.

Movable towel warmer.

Powerful atmospheric burner.

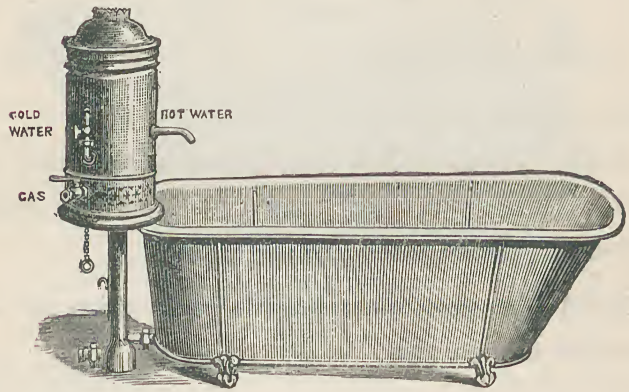
	5-ft.	5-ft. 6-in.
Complete, including gas tap ... ... each	£4 10 0	£4 18 0



No. 296.—The "Challenger" Combined Bath and Boiler, with boiler of tinned copper cased in polished brass.

			With Iron Bath.	With Copper Bath.
No. 1.	5-ft. inside Bath,	5-ft. 8-in. over all, each	£7 12 0	£12 12 0
,, 2.	5-ft. 3-in. ,,	5-ft. 11-in. ,, ,,	9 14 0	15 15 0
,, 3.	5-ft. 6-in. ,,	6-ft. 2-in. ,, ,,	13 10 0	18 18 0

Including Taps for Gas and Water, and Waste Plug.



No. 297.—The "Challenger" Combined Bath and Boiler, same as above, but with standard waste and overflow.

			With Iron Bath.	With Copper Bath.
No. 1.	5-ft. inside Bath,	5-ft. 8-in. over all, each	£8 13 0	£13 13 0
,, 2.	5-ft. 3-in. ,,	5-ft. 11-in. ,, ,,	10 15 0	16 16 0
,, 3.	5-ft. 6-in. ,,	6-ft. 2-in. ,, ,,	14 11 0	19 19 0

Time of Heating, in temperate weather—
No. 1, *30 minutes;* No. 2, *20 minutes;* No. 3, *15 minutes.*

PRICE'S "CHEZ-LUI"

HARD-DRYING ENAMEL

Supplies a demand which has long existed, but has become urgent during the last three or four years; more particularly since the introduction of cast iron baths. These baths are so heavy that the cost of removing and conveying to the japanners, and then of returning and replacing, is often greater than the cost of re-japanning itself. There is besides considerable risk that in the process of removal the bath may receive a blow or have a fall, and be made utterly useless through a crack. Rather than incur all this cost and risk, owners are tempted to try the effect of a few coats of paint; but paint, however carefully laid on, is rough in comparison with the smooth, glossy enamel with which the bath was originally coated. Even if it is resolved to endure this roughness rather than incur the risk of removal, the bath cannot—at any rate for a long period afterwards—be used for anything but cold water. Hot water will soften the paint, and make it quite sticky.

The "Chez-Lui" Enamel dries quite hard without stoving, and will resist hot water.

The "Chez-Lui" is sold in all colours—white, cream, flesh colour, sea green, &c., for baths; red, brown, blue, yellow, black, green, &c., for furniture or hardware—and special tints to match can be supplied to order. It is also made transparent to show through the original colour of polished surfaces of steel, silver, copper, brass, or gold, and will be found invaluable for preventing rust, and abolishing the necessity of constantly polishing. It is on this account much recommended for enamelling the bright and plated parts of machines, tricycles, bedsteads, &c.

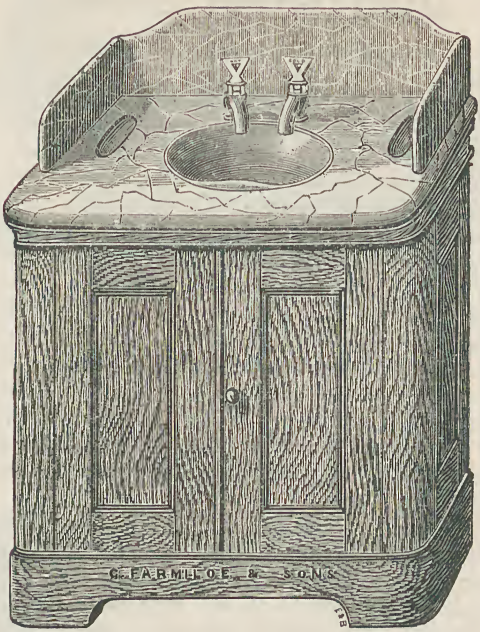
No. 1.—Small sample can (self-opening) for enamelling small articles or repairs, and touching up ...	1/0	free by post	1/3
,, 2.—Larger sample, in self-opening can, sufficient to enamel a bicycle or tricycle two coats ...	1/6	,, ,,	1/9
,, 3.—Half pint, in self-opening can, will give two coats to full-sized plunge bath	4/6	,, ,,	4/9
,, 4.—One pint, in self-opening can, will give four coats to full-sized plunge bath	8/0	,, ,,	8/6

EXTRAS.

Brush for touching up and small work	2d.
Brush for baths and large work	1/0

LAVATORIES.

For Enamelled Iron Lavatories, see pages 211 to 214.

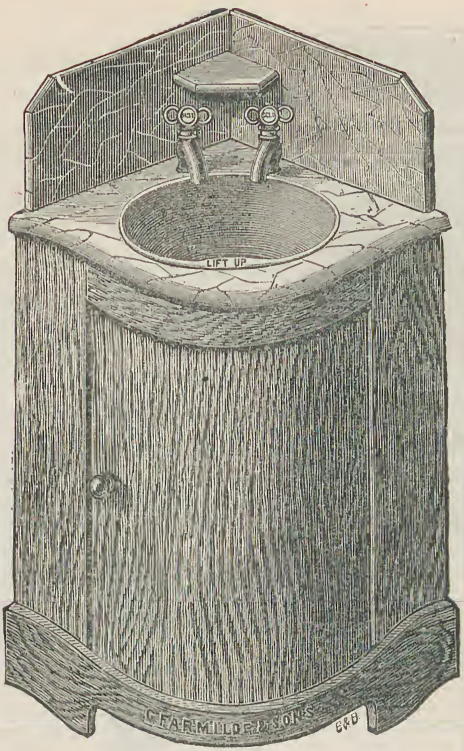


No. 298.—George Farmiloe & Sons' Square Tip-up Lavatory.

With mahogany panelled enclosure, and doors in front, with nickel plated cam action taps for hot and cold; size of top, 2-ft. 9-ins. by 2-ft. outside.

With white veined marble top and 14-in. basin, each				£11 11 0
,, St. Ann's	,,	,,	,,	12 12 0
,, white veined	,,	16-in. basin	,,	12 12 0
,, St. Ann's	,,	,,	,,	13 13 0

If with one tap only, 12/6 less.
With gold lined basin, 10/0 extra.
If without enclosure, £6 6 0 less.



No. 299—George Farmiloe & Sons' Angle Tip-up Lavatory.

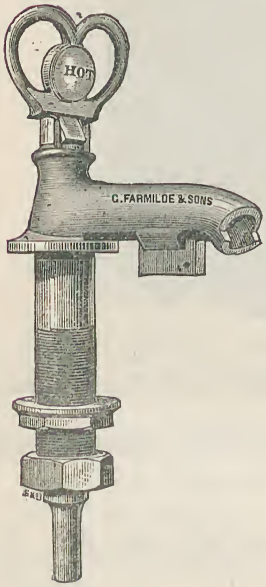
With mahogany enclosure and door in front, with nickel plated cam action taps for hot and cold.

With white veined marble top and 14-in. basin, each				£9 9 0
,, St. Ann's	,,	,,	,,	10 10 0
,, white veined	,,	and 16-in.	,,	10 10 0
,, St. Ann's	,,	,,	,,	11 11 0

If with one tap only, 12/6 less.
With gold lined basin, 10/0 extra.
If without enclosure, £4 4 0 less.

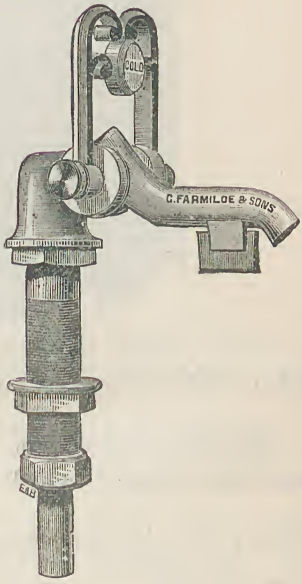
No. 300.—Earthenware Tip-up Lavatory and Receiver, with brass pivots, complete.

	White.	White & Marble.	Gold.
12-in. basins	21/0	23/0	26/0
14-in. „	24/0	26/0	30/0
16-in. „	34/0	36/0	42/0



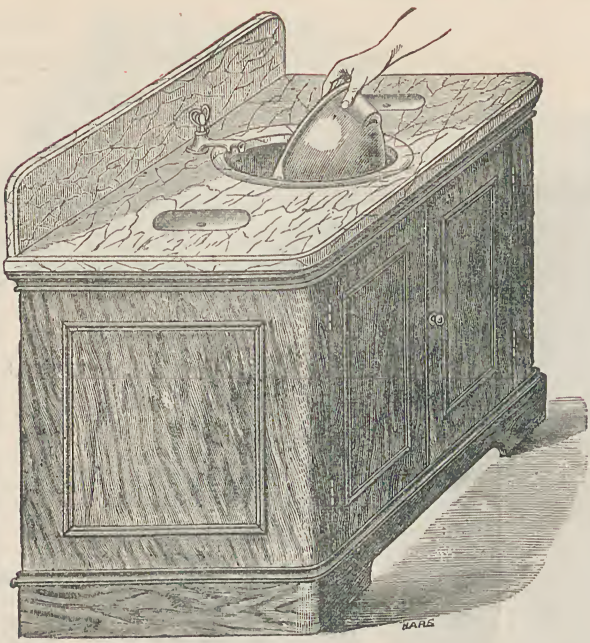
No. 301.—Cam Action Lavatory Valve.

Brass	each 10/6
Nickel plated ...	„ 12/6



No. 302.—New Pattern Lever Lavatory Valve.

Brass...	each 11/6
Nickel Plated ...	„ 13/6



No. 303.—Jennings' Patent Tip-up Lavatory.

With Improved Patent Tip-up and Lift-out Basins, only supplied complete with top of Slate or Marble, and other Fittings essential to their efficiency.

All George Jennings' manufactures bear the name and address of patentee. The Patent "Tip-up" Basins can be had in Plain Slate, with "Cold" Supply Cock and all necessary fittings complete, but without Wood Enclosure... ... ... each 63/0

Ditto, ditto, in Enamelled Slate ... ... ,, 84/0

Ditto, ditto, in Polished Marble ... ... ,, 126/0

EXTRA.

Large-size or Decorated Basins ... ... from 21/0 to 63/0

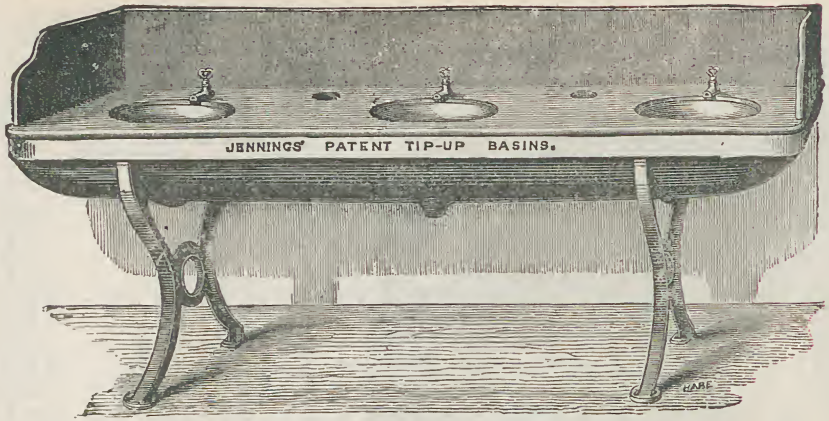
Yellow Metal Supply Cock, "Hot" ... ... each 12/6

Silver-plated ditto ... ... ,, 21/0

Electro-gilt ditto "Hot" and "Cold" ... ... ,, 30/0

When ordering Lavatories, it is necessary to state the Length of Slab required, and a figured plan or hand sketch is preferred, showing the position it will occupy when fixed, *i.e.*, a right or left-hand angle, in a recess, or against a wall only at back, so that skirtings, rounded corners, moulded edges, &c., may be prepared as necessary. It is also requisite to state if Hot as well as Cold Water Taps are required, and whether these are to be "Self-closing" or Screw-down, the former (as ordinarily supplied) will be found preferable, but the Water Companies' Regulations often compel the use of the latter.

In fixing Lavatories, set the Marble-work with plaster of Paris; no putty or oily substance must be allowed to touch the Slab, as grease stains cannot be removed from Marble.



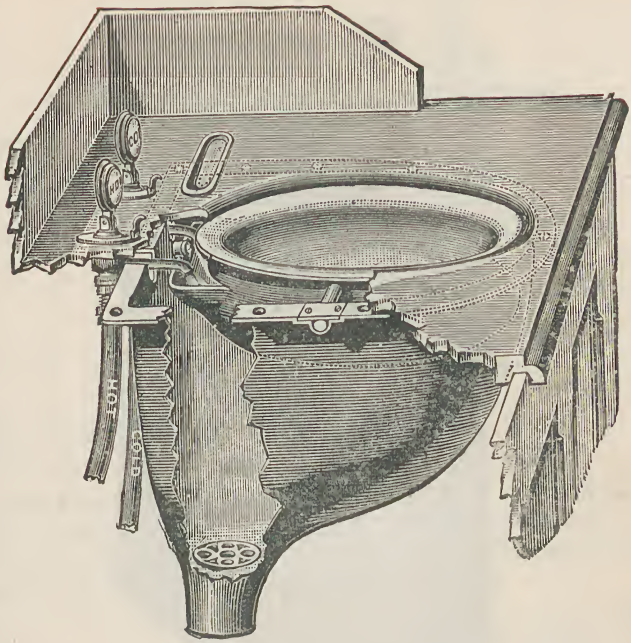
No. 304.—JENNINGS' Patent Tip-up Lavatories, on iron standard.

For schools these lavatories are much preferred to plug basins, for their cleanliness, durability, and economy; there being neither chains to break, plugs to lose, nor small wastes to become stopped.

The use of iron standards and frames, and absence of all woodwork, renders the lavatories better adapted for rough usage, provides easy access to the trap and connexion with waste, and allows of the whole floor space being properly cleansed; with these stands white glazed stoneware receivers are now used in place of metal, thereby insuring greater cleanliness and freedom from corrosion.

Complete as above shown, with plain slate top, white basin, yellow metal cock, &c., per basin	£3	10 0
,, ,, ,, enamelled slate top, ,, ,, ,, ,,	4	10 0
,, ,, ,, polished marble top, marbled basins, and silver-plated cock ,,	6	15 0

Hot water supply cocks, extra: yellow metal, 12/6; silver-plated, 21/0 each.



No. 305.—CLARK'S Patent Enamelled Iron Anti-Splash Tip-up Basin.

According to this improvement, the sides of the basin are formed to curve inwards as they rise toward the upper edge. This curve is continued to nearly the top of the basin, when it changes into a similar curve of contrary flexure, and the inner contour of the vessel is so arranged that water is prevented from splashing over the side.

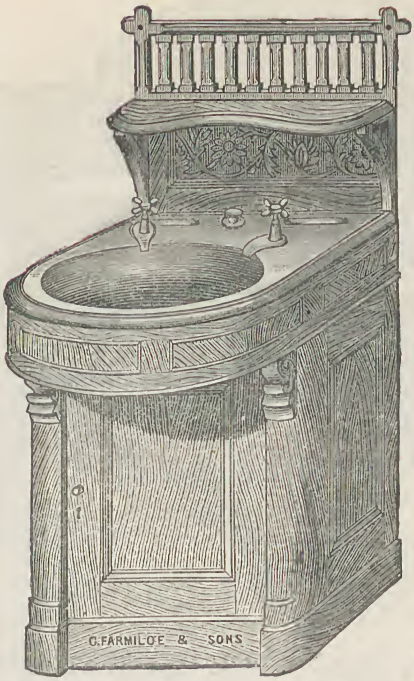
A lip is formed at the back of the basin, taps for supply may be placed immediately above the lip, so as to be entirely out of the way. This lip serves also as the overflow.

Enamelled iron basin and container, 2 brass spring taps, 2 enamelled soap dishes ... ... per set 55/0

No. 306.—Enamelled Iron Tip-up Basin, 14-in. diameter (old pattern), and enamelled container, with galvanized trap and brass pivots complete ... ... per set 28/6

Enamelled basin only ... ... each 6/6

Tops of Marble or Slate, etc., to order.



No. 307.—SHANKS' Patent Combined Lavatory Stand, with hot, cold, and waste valves complete.

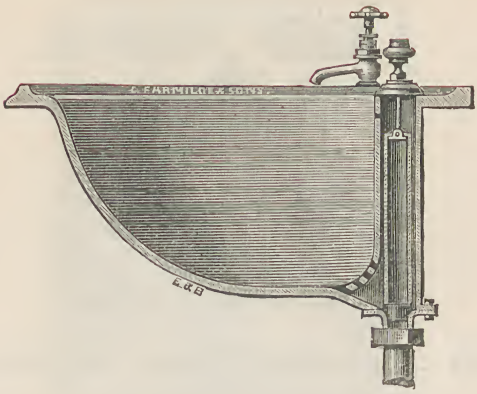
These are of iron and wood combined; are strong and durable, and painted in imitation of wood.

No. 1.	With top 29-in. across ... ... each	£7 19 0
„ 2.	„ 26-in. „ ... ... „	6 15 6
„ 3.	„ 21½-in. „ ... ... „	5 10 6
„ 4.	With tip-up basin, and top 26½-in. across „	7 2 6

EXTRA.

With Nickel Plated Taps ... ... per set 5/0

For drawing of Basin only, see next page.



No. 308.—Shanks' Patent Lavatory.

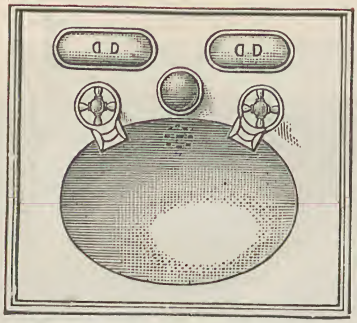
This is far preferable to the ordinary plug basin. The waste pipe is solid with the basin, in one piece of earthenware; there is no loose plug in the basin; it is easily fixed; secure from leakage, waste valve acts as overflow; and the whole arrangement is most compact and cleanly.

	White.	Marbled.	White & Gold.
Round basin, 14½-in. inside diameter, with waste pull complete ... ... each	19/0	21/6	25/0
Ditto, with hot and cold taps ... „	27/6	30/0	33/6
Oval basin, 19½ × 15½ inside, with waste pull complete ... ... each	28/6	32/0	40/0
Ditto, with hot and cold taps ... „	37/0	40/6	48/6
Oval basin, 18 × 13¼ inside, with waste pull complete ... ... each	27/0	30/6	38/6
Ditto, with hot and cold taps ... „	35/6	39/0	47/0

EXTRA.

Nickel Plated Taps, and Waste Pull ... ... each 1/6

MARBLE OR SLATE TOPS SUPPLIED TO ORDER.



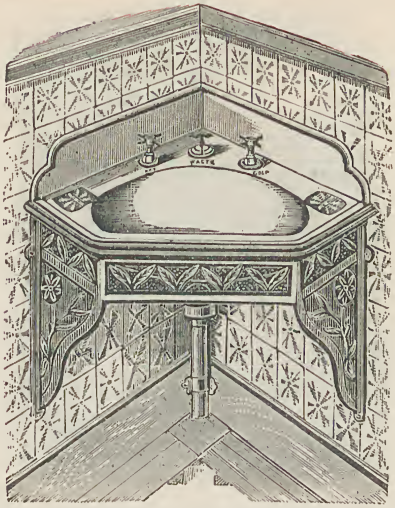
No. 309.—SHANKS' Patent Lavatory, with fittings complete for hot, cold, and waste.

No. 2.	2-ft. 5 in. × 1-ft. 10-in.,	White ... ... each	86/0
,,	,,	Marbled ... ... ,,	95/6
,,	,,	Colored bands ... ,,	115/6
,,	,,	Gold bands ... ... ,,	121/0
No. 5.	2-ft. 2-in. × 1-ft. 9-in.,	White ... ... ,,	74/0
,,	,,	Marbled ... ... ,,	82/6
,,	,,	Colored bands ... ,,	97/6
,,	,,	Gold bands ... ... ,,	103/6
No. 8.	1-ft. 9½-in. × 1-ft. 6½-in.,	White ... ... ,,	62/6
,,	,,	Marbled ... ... ,,	69/6
,,	,,	Colored bands ... ,,	81/6
,,	,,	Gold bands ... ,,	86/0

EXTRA.

Brass Work Electro-plated 3/0

A VARIETY OF OTHER SHAPES CAN BE HAD.



No. 310a.—Steamless and Noiseless Combined ANGLE Lavatory, with bronzed iron bracket stand, and polished brass trap and waste pipe, with hot, cold, and waste fittings complete, requiring no casing.

SIZE OF TOP.			
22-in. by 18-in. ... ... each	£4	14	0
27-in. ,, 20-in. ... ... ,,	5	6	0
30-in. ,, 22-in. ... ... ,,	6	10	6

EXTRAS.

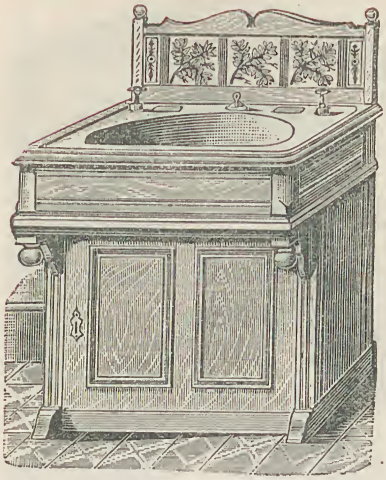
Nickel plated valves ... ... each	0	3	0
Plated trap and pipe ... ... ,,	0	6	0

No. 310b.—Steamless and Noiseless Combined OBLONG Lavatory, with bronzed iron bracket stand, and polished brass trap and waste pipe, with hot, cold, and waste fittings complete, requiring no casing.

SIZE OF TOP.			
18-in. by 18-in. ... ... each	£3	15	0
22-in. ,, 18-in. ... ... ,,	4	14	0
27-in. ,, 20-in. ... ... ,,	5	6	0
30-in. ,, 22-in. ... ... ,,	6	10	6

EXTRAS.

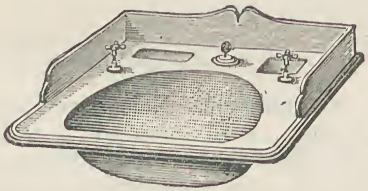
Nickel plated valves ... ... each	0	3	0
Plated trap and pipe ... ... ,,	0	6	0



No. 310c.—Steamless and Noiseless Combined OBLONG Lavatory, with pitch pine or ash casing, and hot, cold, and waste fittings.

		WHITE.	MARBLE.
Top 30-in. × 22-in.	each	£8 4 0	£8 13 0
,, 27-in. × 20-in.	,,	6 19 0	7 6 0
,, 22-in. × 18-in.	,,	6 7 6	6 14 6
,, 18-in. × 18-in.	,,	5 2 6	5 7 6

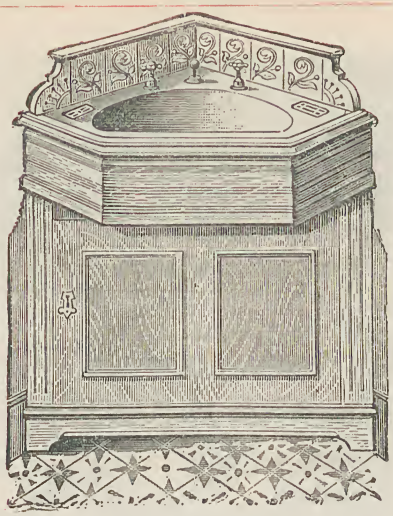
Plated valves, 3/0 extra. Vertical spray, 26/0 extra.



No. 310d.—Steamless and Noiseless Combined OBLONG Lavatory Top, fitted with hot, cold, and waste valves.

		WHITE.	MARBLE.
30-in. × 22-in.	each	£4 4 0	£4 13 0
27-in. × 20-in.	,,	3 5 0	3 12 0
22-in. × 18-in.	,,	2 17 6	3 4 6
18-in. × 18-in.	,,	2 2 6	2 7 6

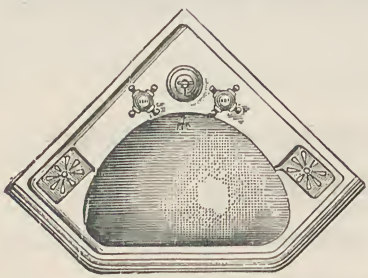
Plated valves, 3/0 extra. Vertical spray, 26/0 extra.



No. 310e.—Steamless and Noiseless Combined ANGLE Lavatory, with mahogany or walnut casing, and hot, cold, and waste fittings.

			WHITE.	MARBLE.
Top 30-in. × 22-in.	...	each	£10 0 0	£10 9 0
,, 27-in. × 20-in.	...	,,	8 15 0	9 2 0
,, 22-in. × 18-in.	...	,,	8 3 6	8 10 6
,, 18-in. × 18-in.	...	,,	6 18 6	7 3 6

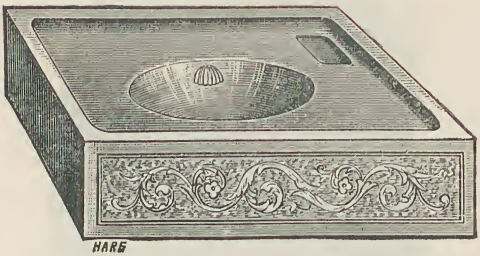
Plated valves, 3/0 extra. Vertical spray, 26/0 extra.



No. 310g.—Steamless and Noiseless Combined ANGLE Lavatory Top, fitted with hot, cold, and waste valves.

			WHITE.	MARBLE.
30-in. × 22-in.	...	each	£4 4 0	£4 13 0
27-in. × 20-in.	...	,,	3 5 0	3 12 0
22-in. × 18-in.	...	,,	2 17 6	3 4 6
18-in. × 18-in.	...	,,	2 2 6	2 7 6

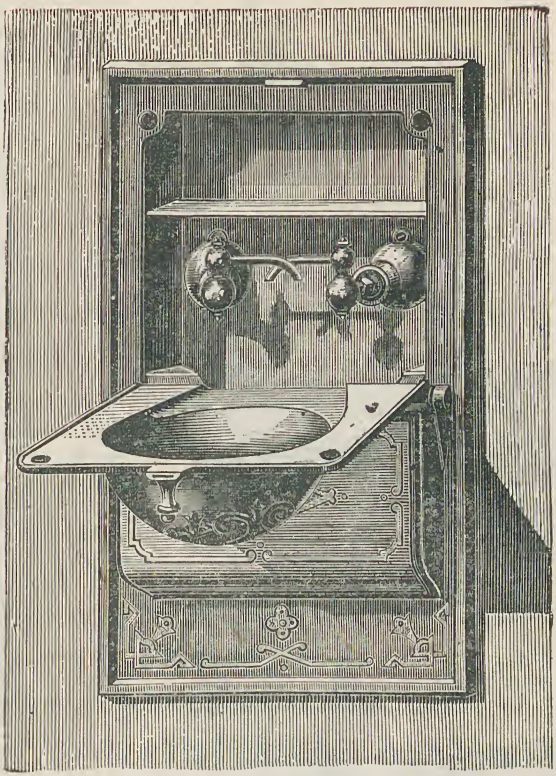
Plated valves, 3/0 extra. Vertical spray, 26/0 extra.



No. 310h.—Stoneware Lavatory Ranges, especially designed for school, workhouse, prison and barrack use, &c.

This Lavatory consists of a series of heavy glazed stoneware slabs with basin (15-in. by 5-in.) and soap dish complete. The slabs are built upon standards of glazed brickwork, the whole forming a most serviceable and substantial range. The supply and waste pipes are under lock and key, an attendant filling the basins simultaneously and after use discharging them in the same manner. The basins may also be fed and emptied separately in the usual manner, a supply tap being fixed above each. Iron standards may be had to replace the brickwork if desired.

Slab in salt glazed stoneware	each	25/0
Ditto, with rounded and moulded edge ...	,,	35/0
Slab enamelled buff colour	,,	45/0
Ditto, with rounded and moulded edge ...	,,	55/0
Waste pipe per basin	,,	12/6
Locked discharge valve	,,	25/0
Waste pipe to connect to drain	,,	10/6
Iron standards	,,	15/0



No. 311.—Smeaton & Schweikert's Folding-up Lavatory.

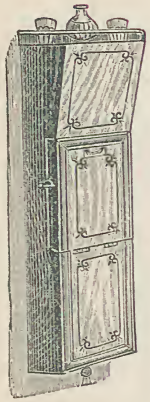
This is of cast iron enamelled, and is made on the same principle as the urinal No. 180.

Dimensions, 29½-ins. by 17½-ins.

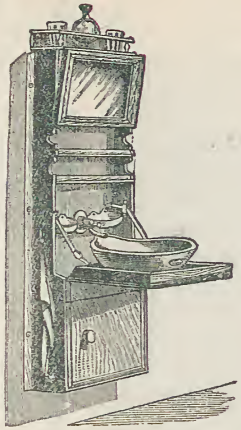
Complete ... ... each £3 12 6

EXTRA.

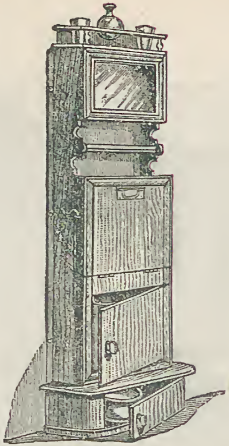
Silver plated taps ... ... each 5 0



No. 1.



No. 4.



No. 6.

No. 7.

No. 312.—SMITH'S Patent Lavatories. Highly recommended where space is of importance.

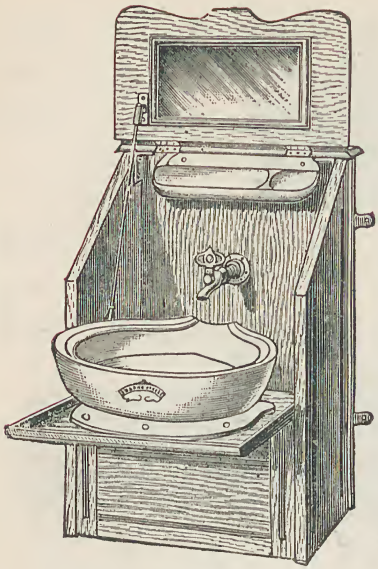
Steamships, railway cars, yachts, manufactories, counting-houses, billiard rooms, hotels, smoking rooms, restaurants.

The advantage of the Patent Lavatory over any others in use, either on board ship, railway cars, or in places where space is of very great importance, consists in the extremely small space on which it stands. The ordinary lavatories in use take up at least from 16-ins. to 24-ins. of space from bulkhead or wall, and are always a fixture; whereas the Patent Lavatory only takes up from 5-ins. to 8-ins., and at the same time gives a large and most convenient shaped basin, with all necessary appliances.

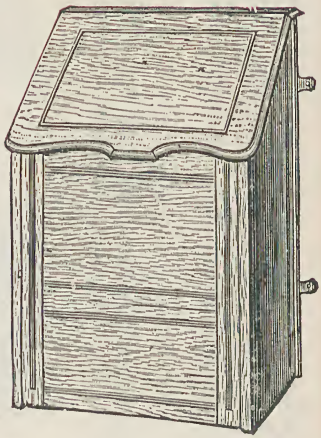
The manner in which the Lavatory is used is exceedingly simple—the basin is fixed to a movable frame, the water being supplied from a tank above, led into basin by a plated spring supply valve. After using, by lifting the frame, the water passes into receiver at bottom, the basin rim being then close against bulkhead or wall. The water may either be led into waste pipe to ship side, or by a drain cock be removed periodically, or by a portable receiver at bottom.

The Lavatory is very easily fixed up, having only to be screwed on to wall or bulkhead. When closed up, the soap dishes and spring supply cock are contained within basin—making a most neat and tasteful article of cabin or state room furniture.

			In yellow pine.
No. 1.	The frame-work of Lavatory made of polished mahogany, oak, walnut, or teak wood, with plated self-closing supply valve and hangers, zinc tank and receiver, and drain cock, with white earthenware oval basin, 15-ins. by 12-ins. ... ... each	£4 7 6	£3 17 6
„ 2.	Ditto, with gilt basin ... ... „	4 12 6	4 2 6
„ 3.	Ditto, with toilet racks ... ... „	6 0 0	5 10 0
„ 4.	Ditto, with mirror, two toilet shelves, and portable receiver at bottom... ... ... each	7 0 0	6 10 0
„ 5.	Ditto, ditto, gilt basin ... ... „	7 5 0	6 15 0
„ 6.	Ditto, ditto, including pot cupboard at bottom ... „	8 6 0	7 15 0
„ 7.	Ditto, with supply valve (no supply tank), small receiver, with connection to drain or waste-pipe, very suitable for houses, offices, or where a supply of water can readily be obtained, each	3 5 0	3 0 0
„ 8.	Ditto, ditto, with gilt basin ... ... „	3 10 0	3 5 0



Open.



Closed.

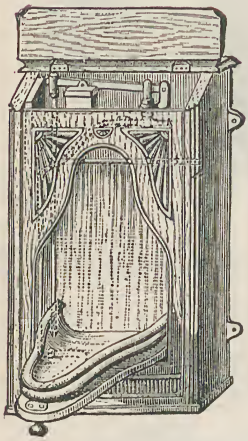
No. 312a.—Patent Folding Lavatory, for offices, bath-rooms, &c , where space is limited.

It is fitted with a plated brass rod which is attached to the platform on which the basin is fixed, and to the hinged lid; by lifting the shut lid the whole is set open ready for use, as shown in sketch.

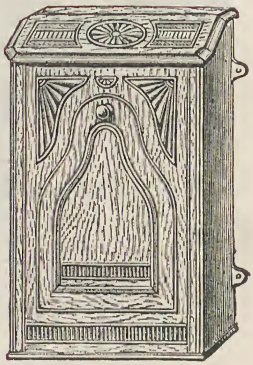
In walnut or mahogany, with nickel plated cock for cold only ... ... each	£4	2	6
Ditto, with hot and cold cocks ... ... ,,	4	12	6
Ditto, with copper tank at back ... ... ,,	4	12	6

EXTRA.

Gilt basin and soap dish	0	5	0



Open.



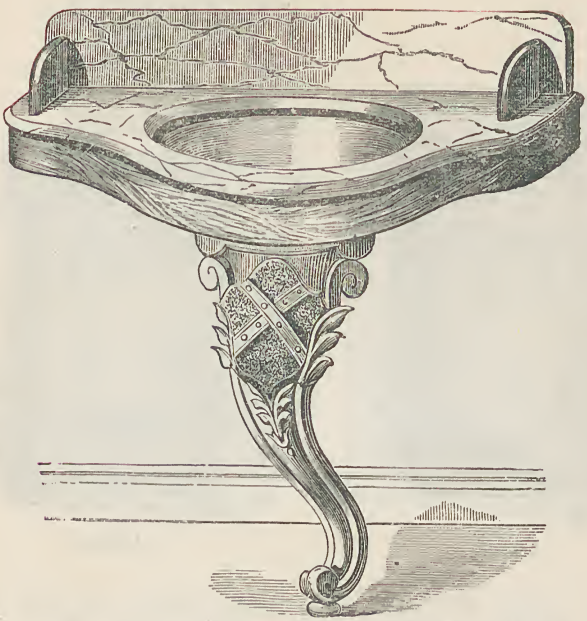
Closed.

No. 312b.—Patent Folding Urinal, for offices, bath-rooms, &c., where space is limited.

This is a most ingenious contrivance, the urinal basin is of white earthenware, kept quite clean by automatic flushing, and when closed the casing has the appearance of a small article of furniture.

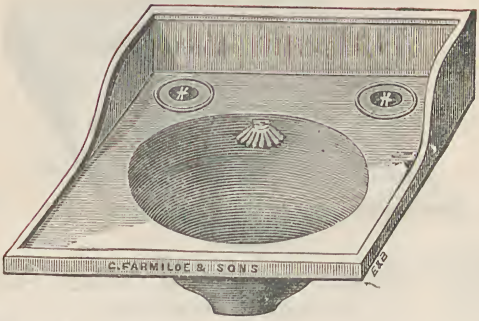
In plain walnut or mahogany	each	£3 15 0
Decorated as shown	,,	4 10 0

The wood-work can be made to any special design.



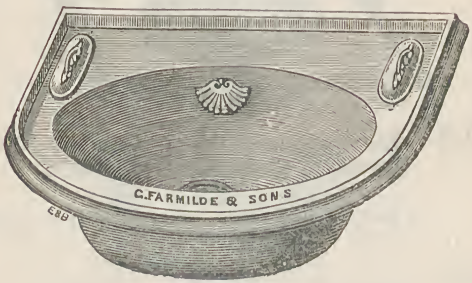
No. 313.—Shampooing Lavatory, marble top, on walnut or mahogany stand, basin and washer and plug.

No. 1.	With skirting as shown, and 18-in. white basin ... ... each	£2	12 0
„ 2.	Ditto, and 20-in. white basin ... ... „	3	2 0
„ 3.	Ditto, and 18-in. marble basin ... ... „	2	14 0
„ 4.	Ditto, and 20-in. „ „ ... ... „	3	4 0
If without skirting at back, and side pieces, Nos. 1 and 3 ... ... less each			5 0
Ditto, Nos. 2 and 4 ... ... „			6 0



No. 314.—Earthenware Lavatory, with skirting.

$17\frac{1}{2} \times 17\frac{1}{2}$	Basin, 12-in.	White ... ... each	13/6
,,	,,	Marble ... ... ,,	15/6
,,	,,	White and gold ... ,,	22/6

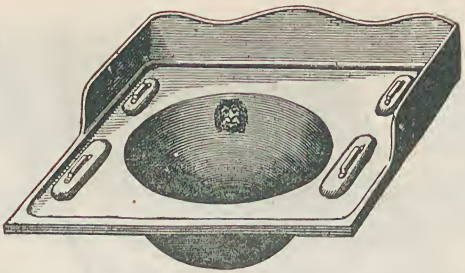


No. 315.—Earthenware Lavatory, round front, oval basin.

$28\frac{1}{2} \times 21$	Basin, $18\frac{1}{2} \times 13\frac{1}{2}$-in.	White ... ... each	38/0
,,	,,	Marble ... ... ,,	44/0
,,	,,	White and gold ,,	61/0

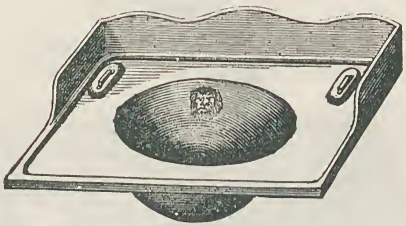
No. 316.—Earthenware Lavatory, with round basin.

26 × 22	Basin, 16-in.	White ... ... each	31/0
,,	,,	Marble ... . ,,	36/0
,,	,,	White and gold ... ,,	51/0



No. 317.—Earthenware Oblong Cabinet Stand. With Skirting. Round Basin.

	No. 1, 27 by 21-in.; basin, 16-in.	No. 2, 28 by 22-in.; basin, 18-in.
White ... ... each	33/0	39/0
Marble ... ... ,,	37/6	44/0
White and Gold ... ... ,,	53/0	59/0

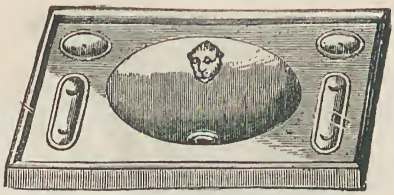


No. 318.—Earthenware Oblong Cabinet Stand. With Skirting. Round or Oval Basin.

	No. 1. 25 by 17-in.; basin, 13½-in.	No. 2. 26 by 19 by 14½-in.	No. 3. 26 by 20½ by 16½-in.
White ... . each	22/6	22/6	33/0
Marble ... ... ,,	25/0	25/0	37/0
White and Gold ... ,,	41/0	41/0	53/0

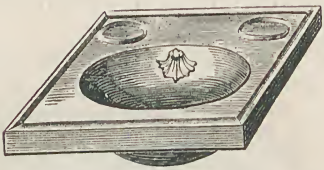
No. 319.—Earthenware Oblong Cabinet Stand. With Round or Oval Basin.

	No. 1, 25 by 17-in.; basin, 13½-in.	No. 2, 26 by 19-in.; basin, 14½-in.	No. 3, 26 by 20½-in. basin, 16-in.
White ... ... each	19/0	19/0	27/0
Marble ... ... ,,	21/6	21/6	32/0
White and Gold ... ,,	35/6	35/6	45/0



No. 320.—Earthenware Oblong Cabinet Stand. Round Basin.

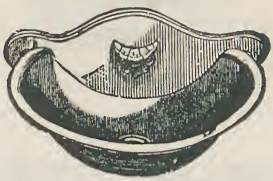
		No. 1. 27 by 21-in.; Basin, 16-in.	No. 2. 28 by 22-in; Basin, 18-in.
White	each	27/0	34/0
Marble	,,	32/0	39/0
White and Gold	,,	45/0	51/0



No. 321.—Earthenware Square Cabinet.

Top 17½-in. by 17½-in.; Basin, 12-in. diameter.

White, each 12/6; Marble, each 14/6; White and Gold, each 20/0



No. 322.—Earthenware Plug Basin. For flat wall.

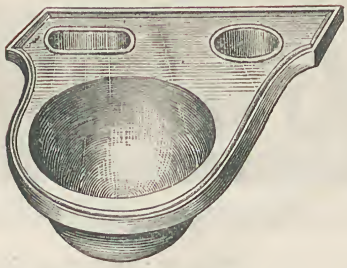
Length at back 17-in.; Basin 15½-in. long by 4½-in. deep.

White ... ... each 7/6

No. 323.—Earthenware Cabinet Stand. For flat wall.

Length at back 14½-in.; Basin 12½-in. by 6-in. deep.

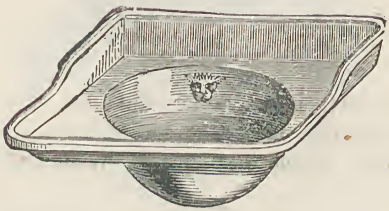
White ... ... each 7/6



No. 324.—Earthenware Round Front Cabinet.

Length of Back, 18-in.; Back to Front, 17½-in.

White	each	12/6
Marble	„	14/0
White and Gold	„	22/6



No. 325.—Earthenware Tray Cabinet.

Top, 20-in. × 17¾-in.; Basin, 13-in. × 6-in.

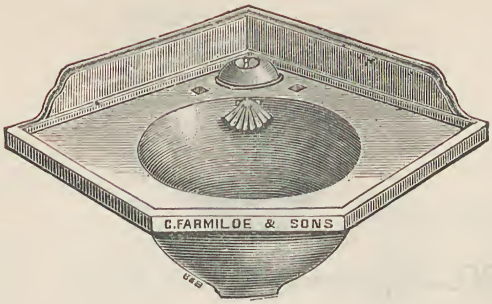
White	each	13/6

No. 326.—Earthenware Semi-Plug Cabinet.

Length at Back, 18½-in.; Back to Front, 11¼-in.

White	each	9/0
Marble	„	10/6
White and Gold	„	14/6

With Overflow, 1/0 each extra.



No. 327.—Earthenware Square-fronted Angle Lavatory.
With skirting.

Top, 30-ins. across; back to front, 26-ins.; basin, 14½-ins. diameter.

White ... ... each 25/6
Marble... ... ... „ 30/0

No. 328.—Earthenware Angle Cabinet.

Top 20-ins. across, 15-ins. at side. Basin 13-ins. by 6-ins. deep.

White ... ... each 14/0
Marble... ... ... „ 15/6

With skirting, 2/0 extra.

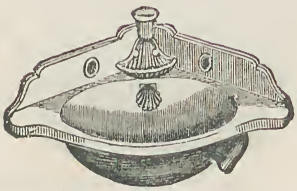
No. 329.—Earthenware Angle Cabinet.

Top 15½-ins. across. Basin, 10½-ins. by 5½-ins. deep.

White ... ... each 7/6

No. 330.—Earthenware O.G. Angle Cabinet.

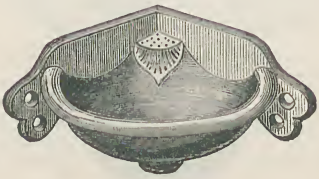
		No. 1. 26-in. across; Basin, 13¼-in.	No. 2. 29-in. across; Basin, 16-in.
White	each	16/0 ...	19/6
Marble	,,	18/0 ...	21/6
White and Gold	,,	24/0 ...	32/0



No. 331.—Earthenware Angle Cabinet.

Top, 19½-in. across; Basin, 13-in. × 6-in. deep.

White ... ... each 8/6



No. 332.—Earthenware Angle Cabinet.

Top, 17-in. across; Basin, 14½-in. across.

White ... ... each 7/6

No. 333.—Earthenware Plug Basin.

	White.	Blue.	Marble.	White and Gold.
10-in. ... each	1/0	1/3	1/4	2/11
11-in. ... „	1/3	1/4	1/7	3/4
12-in. ... „	1/4	1/8	2/0	3/8
13-in. ... „	1/7	2/0	2/4	4/2
14-in. ... „	2/0	2/6	2/11	4/8
15-in. ... „	2/6	3/4	3/10	6/8
16-in. ... „	3/4	4/4	4/8	8/4
17-in. ... „	4/4	5/4	5/8	10/10
18-in. ... „	5/4	6/11	7/10	14/0
19-in. ... „	6/3	7/6	8/7	18/0
20-in. ... „	7/2	8/3	9/4	20/4
22-in. ... „	11/6	14/0	15/0	26/0

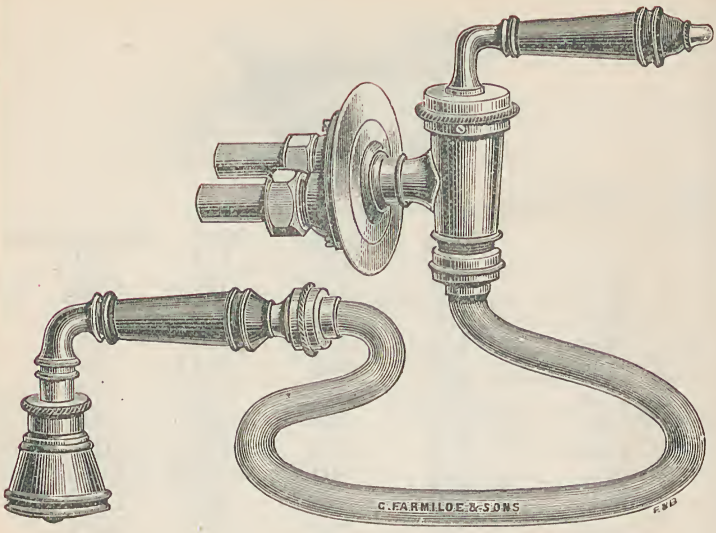
With lion's head or shell supply, up to 14-in. 8d. extra, above 14-in. 1/0 extra.

No. 334.—Earthenware Plug Basin, with overflow.

10-in. to 12-in. each	4d.	extra to above prices.	
13-in. and 14-in. „	7d.	„	„
15-in. and 16-in. „	8d.	„	„
17-in. to 20-in. „	1/0	„	„
22-in. ... ... „	1/4	„	„

No. 335.—Earthenware Oval Plug Basin, with lion head supply.

		White.	Blue.	Marble.	White & Gold.
No. 1.	26-in. by 17-in. by 7-in. each	25/0	27/6	30/0	40/0
„ 2.	22-in. „ 16-in. „ 6-in. „	19/6	22/0	24/0	34/0
„ 3.	19-in. „ 14-in. „ 5½-in. „	16/0	18/0	19/0	27/0

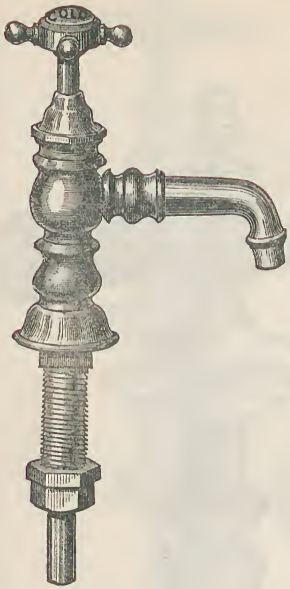


No. 336b.—GEORGE FARMILOE & SONS' Improved Shampooing Valve, for hot, cold and tepid, with ebony handles, patent unions, india-rubber tube and rose complete.

Gun metal... ... ... each 21/6
Ditto, nickel plated... ... ... ,, 29/0

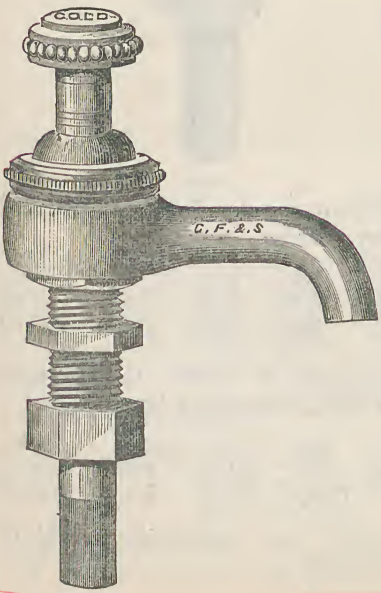
No. 336c.—GEORGE FARMILOE & SONS' Improved Shampooing Valve as above, but with rose so constructed that a douche can be formed by a simple turn with the hand.

Gun metal... ... ... each 26/0
Ditto, nickel plated... ... ... ,, 33/6



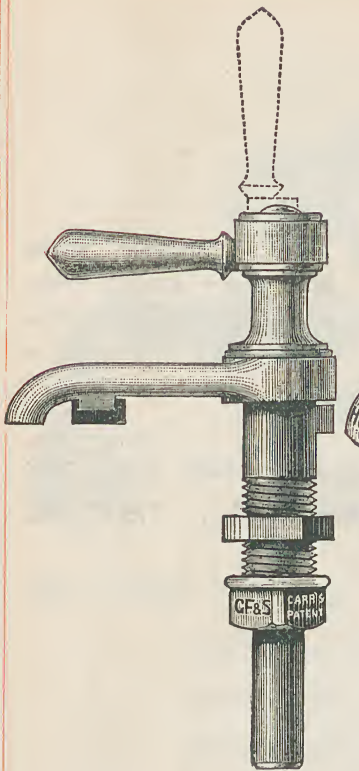
No. 337.— American Screw-down Victor Lavatory Valve, with fly nut and union complete. Marked either hot or cold.

		$\frac{3}{8}$-in.	$\frac{1}{2}$-in.
Gun-metal	... each	5/3	6/3
Do. nickel plated	„	7/9	9/0

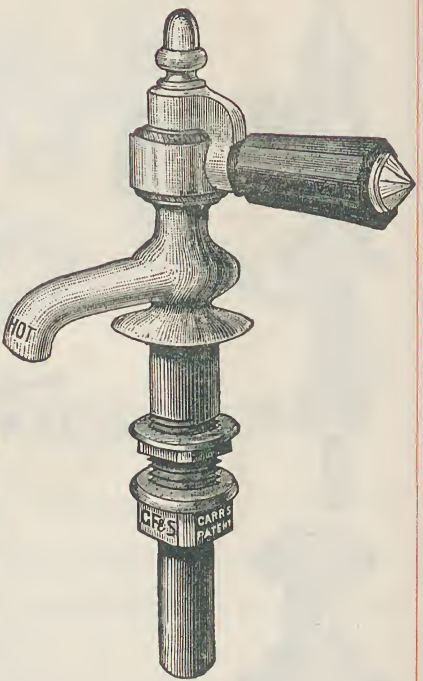


No. 338.— Diaphragm Lavatory Valve, with fly nut and union complete, marked either hot or cold.

		$\frac{3}{8}$-in.	$\frac{1}{2}$-in.
Brass	... each	4/6	6/0
Do. plated	„	6/6	8/6



338A.



338B.

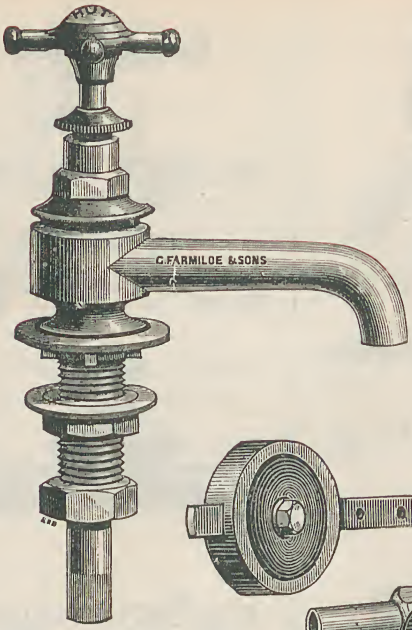
No. 338a.—George Farmiloe & Sons' Bath and Lavatory Valves.

	⅜-in.	½-in.	¾-in.	1-in.
Brass ... ... each	6/0	6/6	10/6	17/6
Electro Plated ... ... ,,	8/0	9/0	13/6	21/0

No. 338b.—George Farmiloe & Sons' Quarter-turn Bath and Lavatory Valves, with ebony levers.

	⅜-in.	½-in.	¾-in.	1-in
Brass ... ... each	9/0	11/0	16/6	21/0
Electro Plated ... ,,	11/0	13/6	19/6	24/6

Marked either "Hot" or "Cold," and made either right or left hand.



No. 338c.

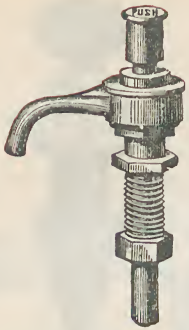
No. 388D.

No. 338c.—GEORGE FARMILOE & SONS' Improved Gun Metal Screw-down Bath or Lavatory Valve, for hot or cold water, with fly nut and union complete.

	½-in.	¾-in.	1-in.
Each	4/0	7/6	12/6
Ditto electro-plated	6/6	10/6	16/0

No. 338d. — GEORGE FARMILOE & SONS' "Pull-up" Lavatory Valves, with ebony knob and brass plate complete

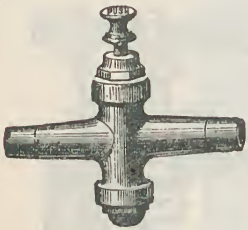
For ½-in. lead pipe ... ... each 12/6
If with ivory knob and electro-plated mount ... ,, 17/6



No. 339.—Upright Spring Basin Valve.

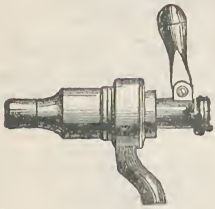
With union.

Yellow Metal... ... each, ⅜-in. 6/6
Silvered ... ... „ „ 8/6



No. 340.—Spring Stop Cock.

For Lead Pipe, ½-in. 4/9, ¾-in. 6/0
„ Iron „ „ 5/9, „ 6/6



No. 341.—Self-closing Basin Valve.

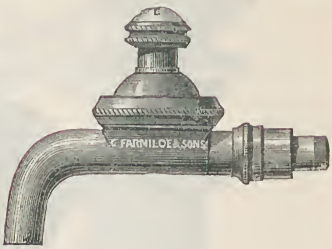
With lever.

Yellow Metal, ⅜-in. 4/9, ½-in. 6/6
Silvered ... „ 6/9, „ 8/9

No. 342.—Self-closing Basin Valve.

With thumb spring.

Yellow Metal, ⅜-in. 4/0, ½-in. 5/3
Silvered ... „ 6/0, „ 7/3



No. 343.—Diaphragm Bib Valve.

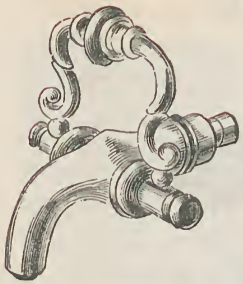
With milled earthenware head, lettered "Hot" or "Cold."

Screwed for Iron, ⅜-in. 3/9, ½-in. 4/9
Screw Ferrule ... „ 4/0, „ 5/0

No. 344.—Diaphragm Stop Valve.

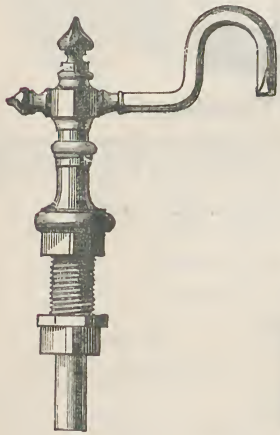
With milled earthenware head, lettered in gold, "Hot" or "Cold."

Tinned ends ... ⅜-in. 3/6, ½-in. 4/6
Screwed for Iron „ 4/0, „ 5/0



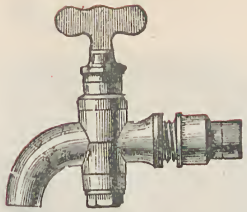
No. 345.—Urn Pattern Lever Basin Cocks.

	⅜-in.	½-in.	⅝-in.
Yellow Metal, each,	4/6	6/6	8/0
Silvered ... ,,	5/6	7/6	9/6



No. 346.—Bracket Basin Cocks.

Yellow Metal ... ... each	7/6
Silvered ... ... ,,	9/3



No. 347.—Upright Basin Cocks.

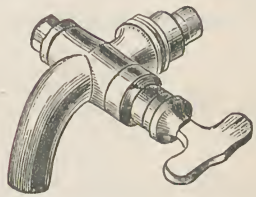
Screw ferrule, screw bottom.

Yellow Metal ... each,	⅜-in.	2/6
Silvered ... ... ,, ,,		3/3

No. 348.—Brass Standard

With screw, nut, and union for basin cock.

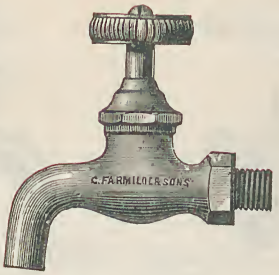
	⅜-in.	½-in.	⅝-in.
Yellow Metal, each,	3/6	5/3	7/0
Silvered ... ,,	4/3	6/3	9/0



No. 349. — Horizontal Basin Cocks.

Screw ferrule, screw bottom, right and left hand.

Yellow Metal ... each,	⅜-in.	2/6
Silvered ... ... ,, ,,		3/3



No. 350.—American Gun-metal Victor Basin Cocks.

With milled earthenware heads, and lettered in gold for either Hot or Cold.

Screwed for Iron	each	⅜-in. 4/0	½-in. 4/6
Screw Ferrule	,,	,, 4/2	,, 4/9
Electro-plated, Screwed for Iron	,,	,, 5/3	,, 6/0
,, Screw Ferrule	,,	,, 5/5	,, 6/3

No. 351.—American Gun-metal Victor Stop Cocks.

With milled earthenware heads, and lettered in gold for either Hot or Cold.

Tinned ends	each	⅜-in. 3/9	½-in. 4/3
Ditto, Electro-plated	,,	,, 5/0	,, 5/9

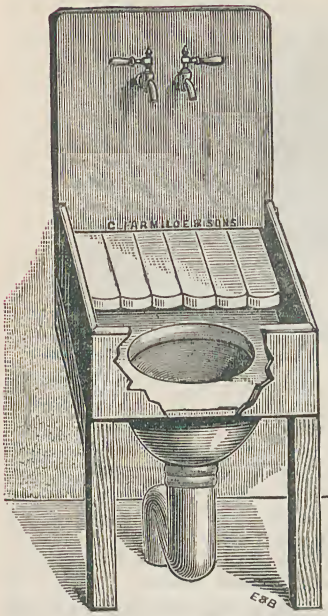
With Union on one end, each, extra ⅜-in. 1/3 ½-in. 1/6.

No. 352.—Washer and Plug, with fly nut and union.

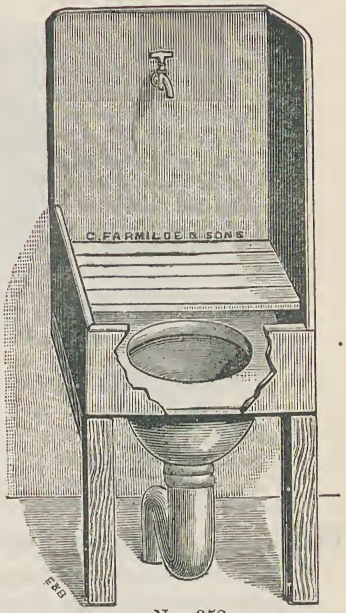
For ¾-in. Pipe ... each 2/3 For 1-in. Pipe ... ... each 3/6

Brass Chain for ditto, light, 6d. per yard; strong, 1/0 per yard.

SINKS.



No. 352A.



No. 352B.

No. 352a.—GEORGE FARMILOE & SONS' Housemaids' Slop Sinks, with pan and trap and hinged cover for pail, sink 18 in. by 18-in., back 21-in. high, as shown, but without bearers and with valve for "COLD" only,

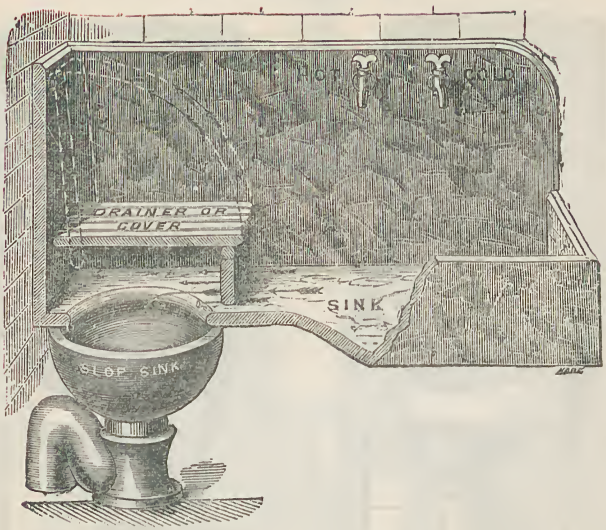
Plain slate...	each	70/0
Enamelled slate	,,	90/0

No. 352b.—Angular as shown, but without bearers and with valve for "COLD" only,

Plain slate...	each	70/0
Enamelled slate	,,	90/0

EXTRA.

If with valve for "HOT" in addition	each	7/6



No. 353.—Jennings' Patent Sink.

For kitchens, sculleries, pantries, and housemaids' closets.

In plain or enamelled slate, of various sizes, to suit any angle, recess, or other required position ; particulars or plan of which may be sent.

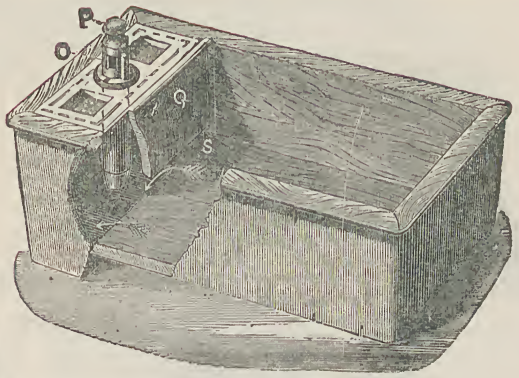
When ordering a Kitchen Sink, it is necessary to state the position in which it will be placed ; if it is to discharge right or left hand ; if "hot" as well as "cold" taps are required ; and whether "self-closing" or "screw-down" are preferred. Where required to withstand a high pressure, "screw-down" taps are found more suitable, as percussion in the pipes is thereby avoided. Also say if the Sink is to be of enamelled or plain slate.

Sinks, as a rule, having to be made (as above stated) of special sizes, and to fit various positions, to prevent any delay, orders should be given at earliest date possible.

Household sink (not exceeding 6-ft.), in plain slate, complete, with Lavatory, with cold taps only ... ...each	£10	10	0
Ditto ditto in enamelled slate and ditto ... ... ,,	12	12	0
Sink, in plain slate (not exceeding 3-ft. 6-ins.), complete, as shown, (but with cold tap only) ... ...each	7	7	0
Ditto ditto in enamelled slate, and ditto... ... ... ,,	8	8	0
Slop Sink, in plain slate, 17-ins. square, complete ... ... ,,	4	4	0
,, in enamelled slate, and ditto ... ... ,,	5	5	0

EXTRAS.

Hot water taps, ½-in. ... ... ,,		7	6
,, ,, ¾-in. ... ... ,,		10	6
¾-in. taps, with screwed nozzles and hose unions ... ... ,,		12	6



No. 354.—Jennings' Improved Sink for Kitchen Sculleries, &c.

A Sink being necessary to every house, it will be understood that its value increases in proportion to the variety of purposes for which it is adapted, and any advantage in this respect is the more noticeable in Sinks constructed for use in dwellings of the industrial classes—where space is limited, and room cannot well be spared for the various appliances, could they be afforded. The "Improved Sink," as above shown, not only answers in every respect all the requirements of an ordinary household Sink, but also forms:

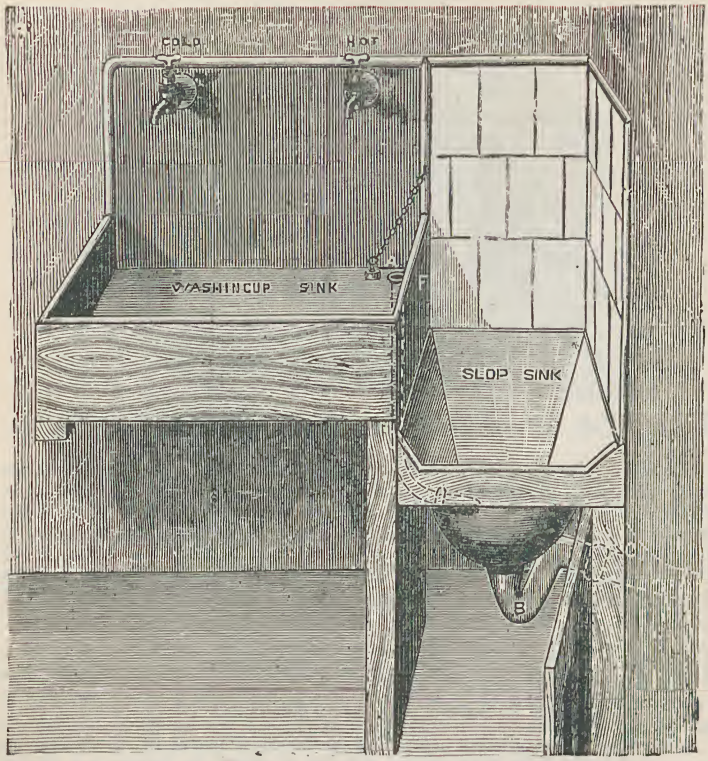
1st. For the cook, an excellent Tub for washing plates, dishes, and vegetables.
2nd. A convenient Wash-tub for the housewife for her linen, &c.
3rd. For the labourer's wife (with but one or two rooms at her disposal), it answers not only the above, but the additional purpose of a child's Bath or a commodious Lavatory for her husband on his return from work.
4th. Lined with white pine, it forms the best possible Sink for butler's pantry, for washing plate, china, and glass, the breakage due to the employment of ordinary Sinks being avoided, and loss of spoons, &c. (owing to a grating carelessly removed and thrown aside), impossible.
5th. Arranged for the reception underneath of a small grate or fire-box (in houses without a hot-water circulation), it answers all the purposes of an ordinary copper.

DIMENSIONS AND PRICES.	Cast Iron.		
	Galvanized.	Enamelled.	Lined with Pine.
No. 1. 2-ft. 5-in. by 16-in. by 8-in. deep	40/0	60/0	60/0
No. 2. 2-ft. 9-in. by 18½-in. by 12-in. ,,	60/0	80/0	80/0
No. 3. 3-ft. 0-in. by 18½-in. by 8-in. ,,			
No. 4. Angular-shape, 19-in. sides, 8-in. deep and 4-in. skirting	35/0	50/0	—

Oak Capping to Wood-Lined Sink extra.

Yellow Metal Self-closing or Screw-down Sink Taps, "Hot" and "Cold," ½-in. 7/6, and ¾-in. 10/6 each.

Sinks of this description are also supplied in Slate to the War Department for Hospitals, Barracks, &c., 3-ft. by 1-ft. 9-in. by 7½-in. deep ... ... each £5 5 0



No. 356.—Hellyer's Patent Water-shoot Slop Sink, and Washing-up Sink combined.

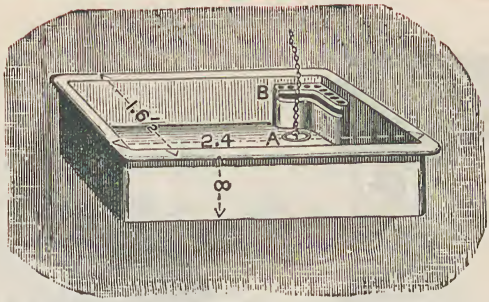
Wood-sink 2-ft. 3-in. by 1-ft. 10-in. by 9-in. deep, outside dimensions, lined with tinned copper, the back standing 16-ins. high from the bottom to form flashing. Also including a strong trumpet mouthed brass standing waste and washer, complete £6 6 0
Ditto, 2-ft. 9-in. by 1-ft. 10-in. by 9-in. deep, ditto, ditto ,, 7 0 0

EXTRAS.

If with patent "Water-shoot" slop-sink, and patent cast lead "anti-D-trap," B, and lead seating 2 15 0
If with ¾-in. best H. P. "screw-down" supply valve for cold water 0 5 9
,, ditto, for hot water 0 6 3
,, ditto, stop-valve E, for flushing out slop-sink 0 4 9

N.B.—This does not include bearers, enclosures, tiles, service and waste-pipes.

Memo.—This Washing-up Sink can be made to any size to suit position: If the length only is altered, add, or deduct, at 2/4 per inch lineal.



No. 357.—HELLYER'S Nursery Sink.

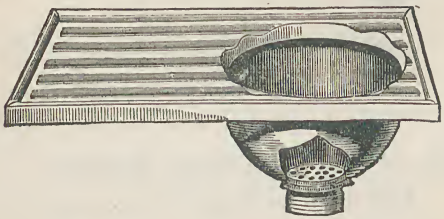
In white-ware, 1-in. thick ... ... each £2 18 6

A.—Brass sunk plug and grated washer, with openings for overflow.

B.—Overflow arrangements,—this is formed in the sink itself.

No. 358.—HELLYER'S Nursery Sink and Slop Sink combined.

With 4-in. cast lead trap, short piece 2-in. lead waste pipe, large brass sunk plug, grated washer, union and chain, complete, each £6 5 0



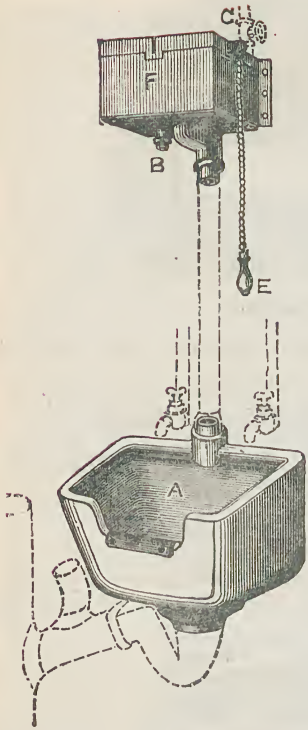
No. 359.—Earthenware Drainer and Slop Basin 24-in. by 14-in. Basin 13½-in. diameter, 10½-in. deep.

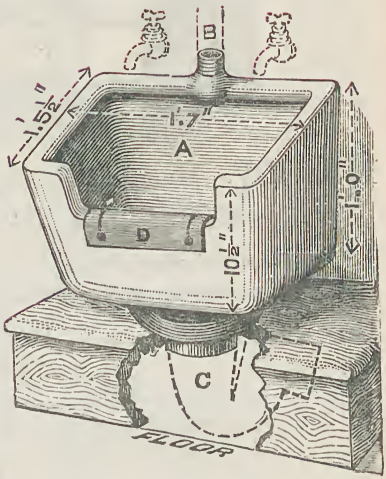
White ... ... each 26/6
Marble ... ... ,, 30/0

No. 359a.—Earthenware Drainer and Slop Basin, as above, but with raised sides and back, 3-in. deep.

White... ... ... each 30/0
Marble ... ... ,, 34/0

Either 359 or 359a can be made for plug in bottom instead of drainer; they can then be used as wash-up sinks.



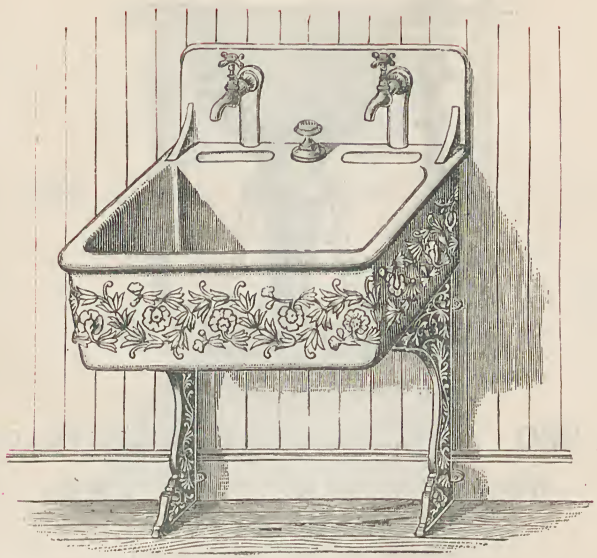


No. 358a.—HELLYER'S Patent "Hospital" Flushing-rim Slop-sink, in strong whiteware, with extra strong whiteware movable "cob-web" grating ... ... each £3 10 0

EXTRAS.

If with Hellyer's patent galvanized cast-iron "Flat-back" syphon cistern, F, for flushing same ... ... each 2 1 0

If with Hellyer's patent cast lead "Anti-D-trap" C, for connection with lead pipe ... ... each 0 7 0

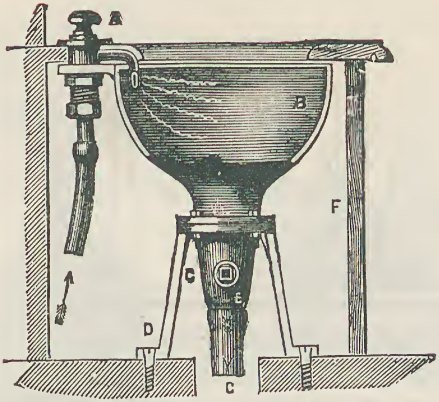


No. 358b.—Enamelled Fire-Clay Sink.

This sink is made with waste-pipe and overflow, enamelled back, with channels for supply pipes, in one solid piece of best fire-clay.

Complete, with nickel plated hot, cold, and waste fittings, ornamental brackets... ... ... each £4 0 0

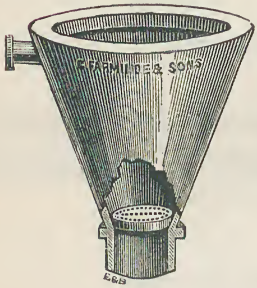
No. 358c.—Ditto, but without floral ornamentation ... ... each 3 14 0



Scale—1-in. equal 1-ft.

No. 360.—Cast Iron Enamelled Housemaids' Slop Closet. With improved trap and iron stand ... each 29/0

If without supply valve, 4/0 less.

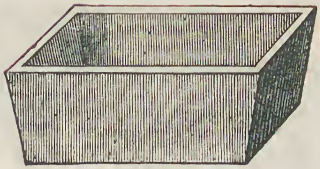


No. 361.—White Earthenware Slop Hopper with grating ... each 6/0

No. 362.—White Earthenware Slop Basin with grating ... each 5/0

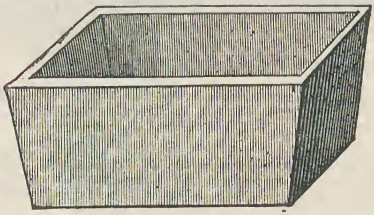
EXTRA.

If with supply arm 1/0



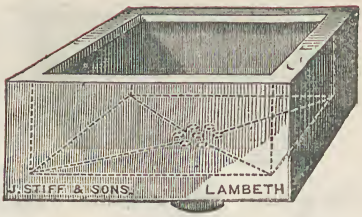
No. 363.—Porcelain Housemaids' Sink, glazed white inside, 32-in. by 18-in. by 9½-in., outside measure, about 1½-in. thick ... ... each £1 10 0

No. 363a.—Porcelain Kitchen Sink, glazed white inside, 36-in. by 20-in. by 4½-in., outside measure, about 1½-in. thick ... ... each £1 4 0



No. 363b.—Porcelain Washing Sink, glazed white inside, 33-in by 21-in. by 13½in., outside measure, about 1½-in. thick... ... ... each £2 10 0

No. 363c.—Porcelain Angle Sink, 20-in. at sides 6-in., deep, outside measure each 0 18 0



No. 364.—Glazed Stoneware Slop Sink, with projecting rim to prevent splashing.

15-in. by 13-in. by 6-in. deep, outside ... ... each 5/6

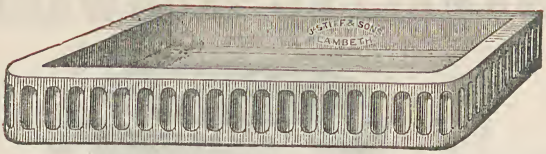
Other sizes made to order.

No. 365.—Glazed Stoneware Sink for hospitals, dispensaries, and other establishments.

	Length.		Width.		Depth outside.		
No. 1.	3-ft. 7-in.	...	18-in.	...	7½-in.	...	each 20/0
No. 2.	3-ft. 0-in.	...	18-in.	...	7½-in.	...	„ 15/0
No. 3.	1-ft. 6-in.	...	14-in.	...	7 -in.	...	„ 7/0

Made with ordinary grating, but can be provided with plug to retain water at any required level.

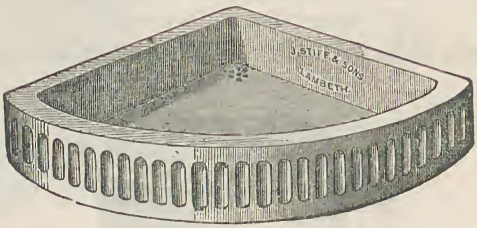
Other sizes to order.



No. 366.—Stoneware Sink.

Are covered with a hard glaze, which renders them non-absorbent and imperishable.

OUTSIDE DIMENSIONS.			
20-in. long,	15-in. wide,	4-in. deep... ... ... each	6/0
22½-in. ,,	16-in. ,,	4-in. ,, ... ,,	7/0
26-in. ,,	18-in ,,	4½-in. ,, ... ,,	8/0
30-in. ,,	20-in. ,,	5-in. ,, ... ,,	10/0
30-in. ,,	20-in. ,,	6-in. ,, ... ,,	12/0
36-in. ,,	22-in ,,	6-in. ,, ... ,,	15/0
42-in. ,,	24-in. ,,	6¼-in. ,, ... ,,	20/0



No. 367.—Angular Stoneware Sink.

24-in. extreme length across front (in straight line)... ... ... each	5/0
28-in. ditto ditto... ... ... ,,	7/0

Perfect freedom from the offensive smells usually experienced from stone sinks is secured by the use of these clean and hard glazed sinks, which are made specially strong and are very durable.

No. 368.—White Glazed Syphon Traps for Stoneware Sinks.

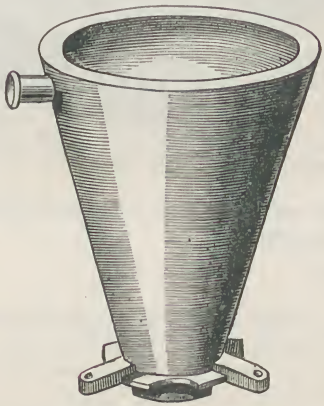
2-in. bore ... ... each	1/6
3-in. ,, ... ,,	1/9

ENAMELLED IRONWARE.

No. 369.—Cast Iron Enamelled Oval Basin and Trap, with copper fan and screws.

Basin 16-in. by 13½-in., total height, 16½-in. each 25/0

If with black S trap, 2/0 less.



No. 370.—Cast Iron Enamelled Hopper.

Diameter, 15⅜-in., height, 17½-in. ... each 11/3

No. 371.—S Trap for ditto ... ... „ 9/0

No. 372.—Cast Iron Enamelled Plug Basin.

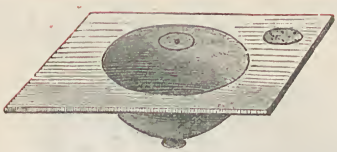
No.	1	2	3	3x	4	4A	4B	4X	4Y	5	5A	5X	6	7	8	9	10
To fit holes in Slate ...diam.	8½	9½	10	11	11½	12	12½	13	13½	14	14½	15	16	18	20	22	24-in.
With or without holes...each	2/9	3/0	3/3	3/6	4/0	4/6	5/0	5/6	6/0	6/6	7/0	7/6	8/6	12/0	15/0	18/0	21/0
With overflow ... ... ,,	3/3	3/6	3/9	4/0	4/6	5/0	5/6	6/0	6/6	7/0	7/6	8/0	9/6	13/0	16/0	19/0	22/0
With side hole for Underhay's valve... ,,	3/3	3/6	3/9	4/0	4/6	5/0	5/6	6/0	6/6	7/0	7/6	8/0	9/6	13/0	16/0	19/0	22/0
Outside diameter of flange...	10	11	11½	12½	13	13½	14	14½	15	15½	16	16½	17½	19½	21½	23½	25½-in.

Plug Bowls with Black Flange, with 4 screw holes to screw under Wood Slab. 1d. per inch less than with Enamelled Rims.
The larger sizes, with Black Flanges, are recommended for Washing Troughs.

No. 373.—Cast Iron Enamelled Anti-Splash Plug Basin.

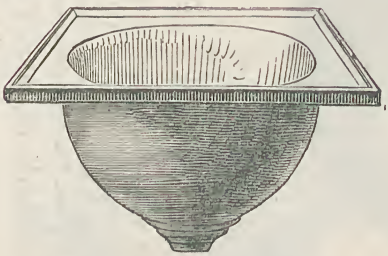
No.	3316	3477	3478	3479
Outside diameter of flange	14½	15½	16½	18½-in.
Inside diameter	12	13	14	16 ,,
With or Without plug hole ... ... each	5/6	7/0	8/6	12/6
With overflow ... ... ,,	6/6	8/0	9/6	13/6
,, ,, and inlet ... ... ,,	8/0	9/6	11/0	15/0

The advantage of the above shaped "Plug Bowl" over the old shape, as **No. 372**, is not only that it prevents in a great measure the splashing of water over the flange, but from its concave shape inside, it holds at least 25 per cent. more water than the old shaped plug bowl of the same inside diameter. Its shape also allows of inlet pipe to be used without a shield.



No. 374.—Cast Iron Enamelled Square Top Plug Bowls.

	Tops. Inches.	Size of Basins. Inches.	Plain.	With Soap Dish and Strainer.
No. 1	12 by 12	... 8½ ...	3/6	... 4/0 each.
„ 2	13 „ 13	... 9½ ...	4/0	... 4/6 „
„ 3	14 „ 14	... 10 ...	4/6	... 5/6 „
„ 4	15 „ 15	... 11½ ...	6/6	... 7/6 „
„ 4A	16 „ 16	... 12 ...	7/0	... 8/0 „
„ 4X	17 „ 17	... 13 ...	7/6	... 8/6 „
„ 5	18 „ 18	... 14 ...	8/6	... 10/0 „
„ 6	21 „ 21	... 16 ...	10/6	... 12/6 „

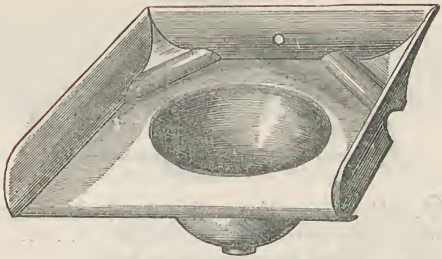


No. 375.—Improved Cast Iron Enamelled Sunk Top Square Bowl.

With or without plug holes.

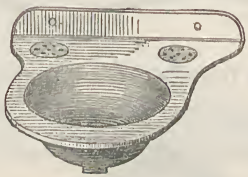
	Size of Top. Inches.			Size of Top. Inches.	
1428	12 by 12	5/0 each.	1435	19 by 19	12/0 each.
1429	13 „ 13	6/0 „	1436	20 „ 20	13/0 „
1430	14 „ 14	7/0 „	1437	21 „ 21	14/0 „
1431	15 „ 15	8/0 „	1438	22 „ 22	16/0 „
1432	16 „ 16	9/0 „	1439	23 „ 23	18/0 „
1433	17 „ 17	10/0 „	1440	24 „ 24	20/0 „
1434	18 „ 18	11/0 „			

The bowls in the above are about 2-ins. less in diameter than the size of the square top, and about half the diameter in depth.



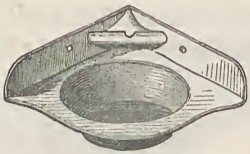
No. 376.—Cast Iron Enamelled Square Lavatory.

No. 364.	18-in. by 18-in. with enamelled edge, each		15/0
„ 657.	„ „	with black edge ... „	11/0



No. 377.—Cast Iron Enamelled Flat Back Lavatory.

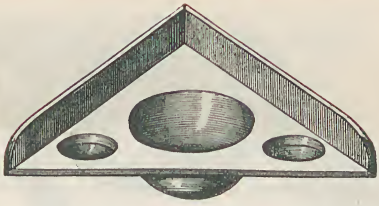
No. 369 ... ... each 12/0



No. 378.—Cast Iron Enamelled Angle Lavatory.

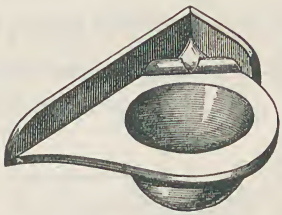
Fig. A, 17.

No. 2438.	30-in. front, with black edge ... each		21/0
„ 361.	27-in. „	with enamelled edge „	15/0
„ 656.	24-in. „	with black edge ... „	10/0



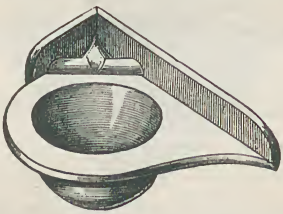
No. 379.—Cast Iron Enamelled Angle Lavatory.

No. 368. With two soap dishes, 38½-in. ... ... each 15/0
,, 1294. Without any soap dishes, 30-in. ... ... ,, 12/0



No. 380.—Cast Iron Enamelled Angle Lavatory. Left hand.

No. 365. With curved enamelled edge, 14/0; No. 1290. With sharp edge, 10/0



No. 381.—Cast Iron Enamelled Angle Lavatory. Right hand.

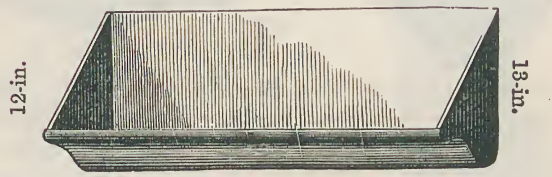
No. 366. With curved enamelled edge, 14/0: No. 1291. With sharp edge, 10/0

No. 382.—Cast Iron Enamelled Angle Lavatory.

No. 367. With curved enamelled edge, 13/0; No. 1293. With sharp edge, 10/0

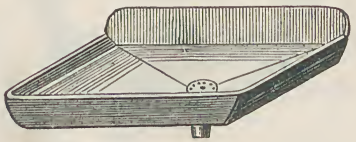
No. 383.—Cast Iron Enamelled Low Back Station Urinal.

Can be made up to 6-ft. long in one piece; if wanted longer, made in two or more pieces, to fit in each other, any length at ... ... per foot 9/6



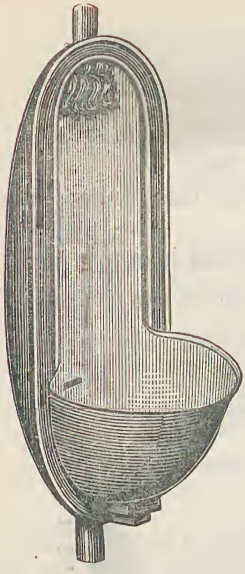
No. 384.—Cast Iron Enamelled High Back Station Urinal.

Can be made any length up to 6-ft. at per foot 10/0



No. 385.—Cast Iron Enamelled Flat Station Urinal.

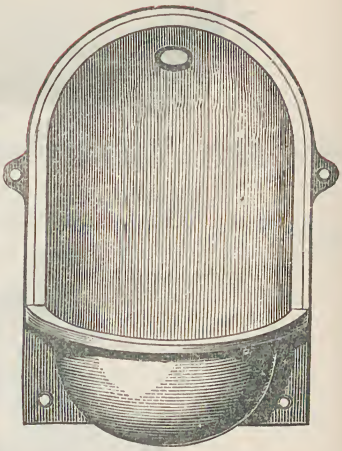
No. 434.	11½-in. by 8-in., with grate, each	4/6
„ 470.	10 „ „ 6 „ „ „ „	4/0



No. 386. — Cast Iron Enamelled Round Back Urinal.

No. 1531. With overflow and brass spreader ... each 18/0

Also made lipped.



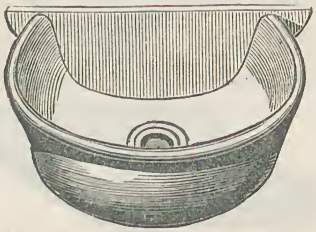
No. 387. — Cast Iron Enamelled Cradle Urinal.

With brass spreader.

No. 151. With angle back, each 14/6
„ 152. „ round „ „ 14/6

If without spreader, each 1/0 less.

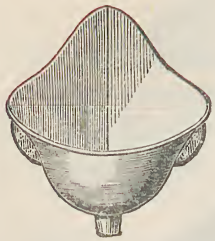
Also made lipped.



No. 388.—Cast Iron Enamelled Flat Back Urinal and Plug Basin.

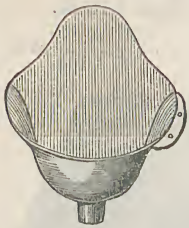
	each.		each.
No. 4. With plug-hole ...	5/6	No. 5x. With pipe and grate	6/6
„ 4x. „ pipe and grate	6/0	„ 6. „ plug-hole ...	7/6
„ 5. „ plug-hole ...	6/0	„ 6x. „ pipe and grate	8/0

With arch back, each 2/0 extra.



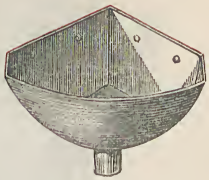
No. 389. — Cast Iron Enamelled Angle Urinal.

No. 135. With enamelled grate, 9/6 each.



No. 390. — Cast Iron Enamelled Flat Back Urinal.

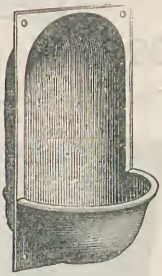
No. 118. With enamelled grate, 8/0 each.



No. 391. — Cast Iron Enamelled Angle Urinal.

With enamelled grate.

No. 8.	15½-in.	...	each	7/6
,, 9.	14 ,,	...	,,	5/6
,, 10.	25½ ,,	...	,,	16/6
,, 871.	21½ ,,	...	,,	10/6

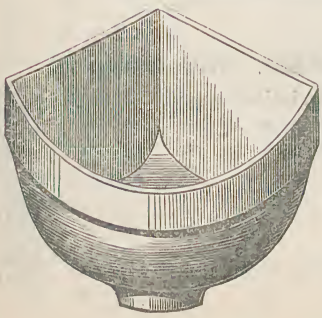


No. 392. — Cast Iron Enamelled Cradle Urinal.

With brass spreader.

		EACH.
No. 138.	With round back	15/0
,, 479.	,, flat back ...	14/0

If without spreader, 1/0 each less.

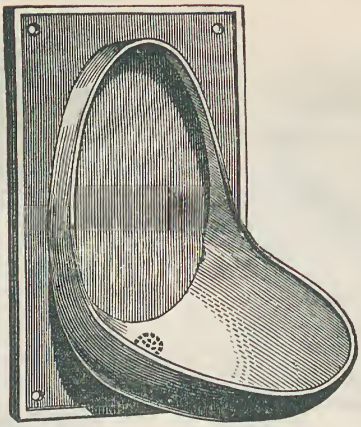


No. 393. — Cast Iron Enamelled Angle Urinal.

Fig. G, 7¾.

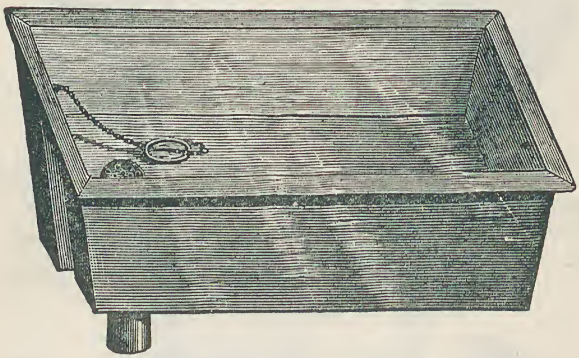
No. 7.	With plug-hole ...	each	5/3
,, 7x.	,, pipe and grate	,,	5/9

With Arch Back, 2/0 each.



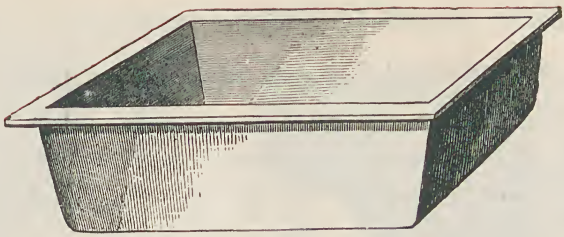
No. 394.—Cast Iron Enamelled Flat Back Urinal.

No. 1343. With Brass Spreader ... ... each 20/0



No. 395.—Enamelled Iron Jaw Box. With brass plug.

No. 2665.	15 by 13 by 7½-in. deep, inside measure					... each	15/0
,, 216.	18 ,, 13 ,, 7½	,,	,,	,,	...	,,	17/6
,, 217.	21 ,, 13 ,, 7½	,,	,,	,,	...	,,	20/0
,, 218.	24 ,, 14 ,, 7½	,,	,,	,,	...	,,	25/0
,, 219.	27 ,, 14 ,, 7½	,,	,,	,,	...	,,	30/0
,, 220.	30 ,, 15 ,, 7½	,,	,,	,,	...	,,	35/0
,, 221.	36 ,, 16 ,, 8	,,	,,	,,	...	,,	40/0
,, 1257.	36 ,, 18 ,, 8	,,	,,	,,	...	,,	50/0
,, 1598.	25½ ,, 15½ ,, 5	,,	,,	,,	...	,,	28/0
,, 1599.	28 ,, 17 ,, 5½	,,	,,	,,	...	,,	55/0



No. 396.—Cast Iron Enamelled Tanks, Cisterns, and Manger Pans.

No.	Inside measure	Size of Black Flanges. in. deep.	Each.
51	13 × 12 × 8	1	9/0
52	25 ,, 13 ,, 8	1	16/0
53	29 ,, 13 ,, 8	1	20/0
149	21 ,, 14 ,, 9¾	1	16/0
150	12 ,, 14 ,, 9¾	1	9/6
193	24 ,, 15 ,, 10½	1	25/0
436	24 ,, 14 ,, 7	1	18/0
438	12 ,, 12 ,, 15	2	30/0
661	30 ,, 21 ,, 14	1	60/0
662	48 ,, 21 ,, 21	1	90/0
669	28 ,, 14 ,, 8	1	25/0
670	18 ,, 18 ,, 8	1	16/0
749	48 ,, 18 ,, 12	1½	60/0
752	30 ,, 15 ,, 10	1	30/0
753	24 ,, 16 ,, 10	1	30/0
754	18 ,, 14 ,, 8	1	16/0
819	18 ,, 12 ,, 18	1	30/0
820	18 ,, 12 ,, 9	1	16/0
859	9 ,, 6 ,, 5	¾	7/6
887	36 ,, 18 ,, 8	1	40/0
900	13 ,, 7½ ,, 5½	½	8/0
934	12 ,, 12 ,, 12	1	12/0
935	30 ,, 20 ,, 8	1	29/0
949	18 × 9 × 6	1	11/0
1246	48 ,, 27 ,, 8	1	75/0
1247	30 ,, 14 ,, 8	1	30/0
1248	42 ,, 14 ,, 8	1	47/0
1304	27 ,, 17 ,, 12	1½	34/0
1379	29½ ,, 19½ ,, 9	1¾	36/0
1394	36 ,, 24 ,, 13	1	60/0
1395	48 ,, 24 ,, 13	1	80/0
1487	30 ,, 16 ,, 5	1	30/0
1532	42 ,, 20 ,, 9	1	60/0
1577	26 ,, 18 ,, 12	1	32/0
1620	24 ,, 16 ,, 12	1	30/0
1999	18 ,, 17 ,, 9	2	32/6
1927	19½ ,, 14 ,, 12	1¾	37/6
1937	20 ,, 20 ,, 11	1	45/0
1972	12 ,, 12 ,, 9	1	15/0
1968	24 ,, 15 ,, 5	1	20/0
1970	30 ,, 18 ,, 7	1	35/0
1999	18 ,, 17 ,, 9	2	32/6
2382	36 ,, 24 ,, 6½	1	45/0
2436	36 ,, 18 ,, 8	3½	70/0
2465	36 ,, 23 ,, 17	1½	90/0

The above can be made with or without plug holes, to order.

No. 397.—Enamelled Iron Kitchen Sinks.

With 2-in. black flange and trap with brass grate.

	OUTSIDE MEASURE OF TOP.			
No. 674.	24-in. by 18-in. by 4-in. deep...	... each	£0	15 0
„ 675.	30-in. „ 18-in. „ 4-in. „ ...	... „	1	0 0
„ 676	36-in. „ 18-in. „ 4-in. „ ...	... „	1	5 0
„ 677.	42-in. „ 20-in. „ 4-in. „ ...	... „	1	10 0
„ 678.	48-in. „ 20-in. „ 4-in. „ ...	... „	1	15 0
„ 2580.	60-in. „ 20-in. „ 4-in. „ ...	... „	2	10 0
„ 2147.	72-in. „ 20-in. „ 4-in. „ ...	... „	3	0 0

No. 398.—Enamelled Iron Butler's Pantry Sink.

	INSIDE MEASURE.		
No. 39.	26-in. by 18-in. by 11½-in.	... each	£1 13 0
„ 40.	25-in. „ 15-in. „ 10½-in.	... „	1 8 0

No. 399.—Enamelled Iron Oval Pattern Butler's Pantry Sink.

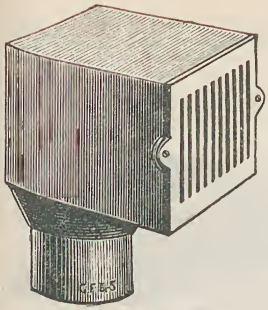
With plug hole.

	INSIDE MEASURE.		
No. 3045.	16-in. by 12-in. by 8-in. deep	... each	12/0

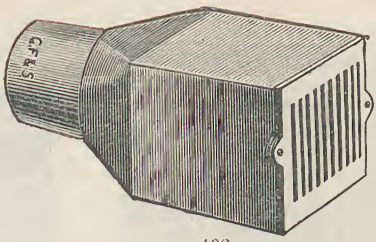
The holes are drilled in flange so that wood top can be screwed to from underneath.

No. 400.—Enamelled Iron Shallow Sink for Pantries.

No. 3740.	18-in. by 12-in. by 4-in.	... ... each	12/0
„ 617.	18-in. „ 15-in. „ 6-in.	... ... „	15/0
„ 3741.	21-in. „ 15-in. „ 6-in.	... ... „	17/6
„ 618.	24-in. „ 15-in. „ 6-in.	... ... „	20/0
„ 619.	30-in. „ 15-in. „ 6-in.	... ... „	22/6
„ 620.	36-in. „ 15-in. „ 6-in.	... ... „	25/0



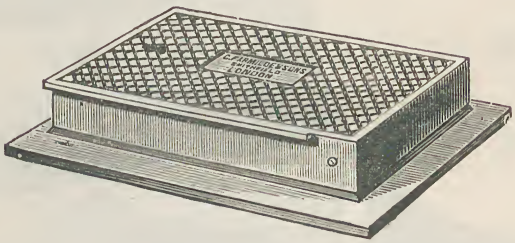
401.



402.

GEORGE FARMILOE & SONS' Galvanized Fresh Air Inlets, with Mica flaps.

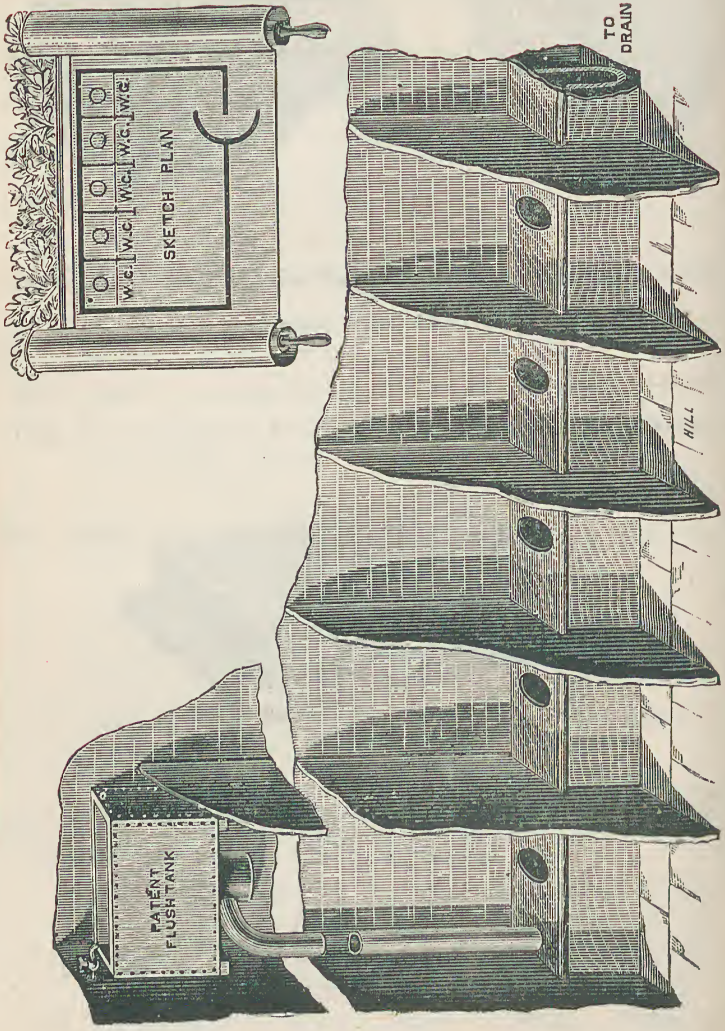
For 3-in. pipe, Nos. 401 or 402	... ... each	6/0
„ 4-in. „ Nos. 401 or 402	... ... „	8/0



402A.

No. 402a.—GEORGE FARMILOE & SONS' Cast Iron, Air-tight Hinged, Man-hole Covers, with wrought-iron key to each.

16-in. by 14-in.	... ... each	18/0
24-in. „ 18-in.	... ... „	25/0
30-in. „ 24-in.	... ... „	35/0


SKETCH PLAN
W.C. W.C. W.C. W.C. W.C.
TO DRAIN
HILL
PATENT FLUSH TANK

No. 403.—Adams' Patent Automatic Trough Closet.

The registered section of this trough is of such a form that soiling is absolutely impossible. The trough is open throughout, enabling seats to be fixed at any required distance apart.

The automatic and sudden discharge of the contents of flush tank effectively scours the closet, and carries all matter through the trapped outlet to drain. The prices include fire-clay trough, wood seats of best pitch pine, flush tank and fall pipe.

No. of Seats	2	3	4	5
	£5 10 0	£6 10 0	£7 15 0	£8 15 0
	6	7	8	9
	11 0 0	12 0 0	14 5 0	15 0 0
	10	11	12	13
	16 10 0	18 10 0	22 0 0	23 0 0
	14	15	16	17
	24 0 0	27 10 0	29 0 0	31 0 0
	18	19	20	
	32 10 0	33 10 0	35 0 0	

These prices apply to the usual length only, 2-ft. 3-in. from centre to centre; for extra lengths add 6/0 per foot.

No. 404.—Zinc Ventilating Pipe.

Since no lapping or welding is to be depended upon (without soldering) for absolutely preventing escape of foul gas in its passage through the pipe, the only real use of welding or grooving is to add stiffness to the pipe. This is better done by increasing the thickness of the metal, so that durability, as well as stiffness, may be secured. Our ventilating pipe is well lapped, and so strongly soldered as to be absolutely sound. Each length (8-ft.) is fitted with a socket projecting 4-ins., into which the next length may be easily slipped, and a secure joint made by packing. On account of its smooth surface, and non-liability to rust, zinc is specially adapted for ventilating pipe, but it is important that it should be of sufficient thickness. The following are prices for the different sizes and gauges of metal.

Gauze of Zinc.	Diameter—	2-in.	3-in.	4-in.	5-in.	6-in.
No. 12 ...	per foot	4d.	5d.	6½d.	8d.	10d.
,, 14 ...	,,	6d.	8d.	10d.	1/0	1/2
,, 16 ...	,,	9d.	11d.	1/1	1/3	1/6

No. 405.—Stout Zinc Stamped Bends.

	2-in.	2½-in.	3-in.	3½-in.	4-in.
Each ...	8d.	9d.	10d.	1/0	1/3

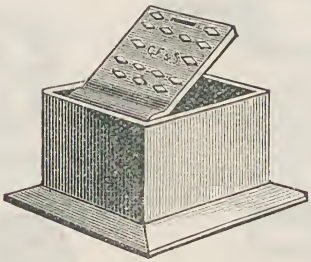
No. 405a.—Stout Zinc Conical Caps.

	2-in.	2½-in.	3-in.	3½-in.	4-in.
Each ...	1/10	2/0	2/3	2/6	2/9

No. 405c.—George Farmiloe & Sons' Concussion Union, for preventing the noise caused by concussion in water pipes. The inner tube is of india-rubber, and allows for the expansion or rebound, however quickly it may take place. Made of any size or shape to order. Can be used in place of ordinary union.

No. 405d.—George Farmiloe & Sons' Improved Cast Iron Wall Fountain, suitable for high or low pressure, non-concussive.

Each ... ... ,, ... 12/0



No. 405e.—George Farmiloe & Sons' Cast Iron Stop Cock Box.

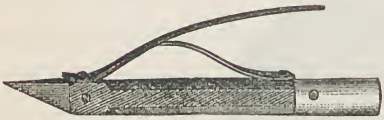
4½-in. by 4½-in. ... ... each 1/8

DRAIN CLEANSING APPARATUS.

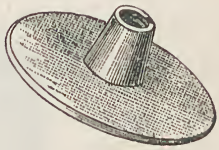
No. 405g.—A complete set, including spring hook, double worm screw, plain and jointed scraper, and an 8-in. bone head.

30-ft.	per set	£2	12	0	70-ft.	each	£4	7	6
40-ft.	,,	3	0	6	80-ft.	,,	4	16	6
50-ft.	,,	3	10	0	90-ft.	,,	5	5	0
60-ft.	,,	3	19	0	100-ft.	,,	5	13	0

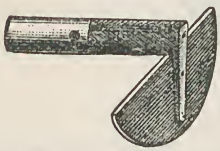
Single Canes, fitted with brass screws,
2-ft. 6-in. 2/2 3-ft. 2/9 3-ft. 6-in. 3/2 4-ft. 3/7 each.



No. 1, Spring Hook, 5/2 ea.



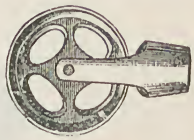
No. 2, India-rubber Plungers,
4-in. 2/10 5-in. 3/4
6-in. 4/0 each.



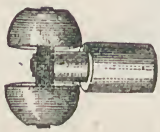
No. 3, Plain Scraper, 2/10 ea.

No. 4, Jointed Scraper,
3/10 each.

No. 5, Double Worm
Screw ... 5/8 ea.



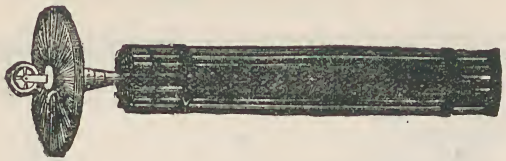
No. 6, Gun-metal Clearing
Wheel .. 4/0 ea.



No. 7, Universal Clearing
Wheel ... 4/2 ea.

No. 8, Clearing Wheel, 2/0 ea

CHIMNEY SWEEPING MACHINERY.



No. 405h.—Chimney Sweeping Machines, including 18-in. whalebone head and chimney cloth.

30-ft.	per set	£2	15	9	60-ft.	per set	£4	2	0
40-ft.	,,	3	4	3	70-ft.	,,	4	10	6
50-ft.	,,	3	12	6	80 ft.	,,	4	17	0

With best hand brush and shovel ... ... 6/0 extra.

Single Canes, fitted with brass screws.

2-ft. 6-in. 2/2 3-ft. 2/9 3-ft. 6-in. 3/2 4-ft. 3/7 each.

Whalebone or Bass Heads, with brass fittings.

		Bass.	Bone.			Bass.	Bone.
12-in.	each	—	12/3	18-in.	each	6/0	18/0
14-in.	,,	—	13/6	20-in.	,,	7/0	20/6
16-in.	,,	5/4	15/9	22-in.	,,	7/6	26/0

No. 1, Hand Brushes, 2/9 3/4 3/10 each.

No. 2, Wire Flue Brushes, 3-ft. 1/2 4-ft. 1/5 5-ft. 1/8 6-ft. 2/0 each.

No. 3, Grappling Irons, 2/10 each.

No. 4, Soot Shovels, 1/2 each.

Chimney Cloths, with slide and case ... ... each 11/6

No. 405j.—GEORGE FARMILOE & SONS' "Peerless" Water Closet Cleaner

(Patent No. 2183, 1885.) Simple, cheap, and effective.

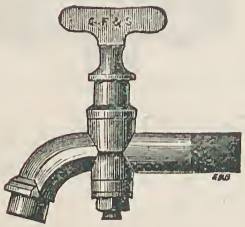
The above cut represents **something entirely new,** and which should be in every house, hotel, or any place where there is a water closet. It is made of corrugated rubber, with a wooden handle about two feet long. **It does not allow the hands to get soiled,** and is so constructed that it will reach any part of the basin or hopper and clean it thoroughly. It can also be used as a plunge in case of any obstruction in the trap.

Each 3/0

PLUMBERS' COCKS.

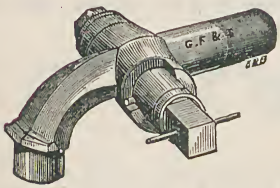
For Bath Cocks, see pages 151 to 155.

For Lavatory Cocks, see pages 194 to 198.



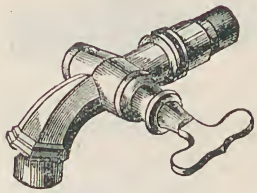
No. 406.—Bib Cock.

Screw bottom.

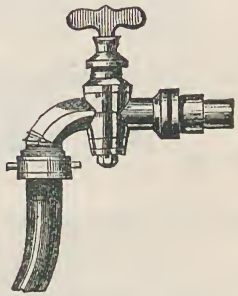


No. 407.—Ball Cock.

Screw bottom.



No. 408.—Horizontal Bib Cock.
Screw bottom.



No. 409.—Bib Cock.

Screw bottom, with union on nose.

Nos. 406, 407 and 408—

	⅜-in.	½-in	⅝-in.	¾-in	⅞-in.	1-in.	1¼-in.	1½-in.	1¾-in.	2-in.
Tinned ... each	2/0	2/6	3/3	3/10	4/8	6/0	9/0	12/0	20/0	25/6
Screwed for iron	2/4	2/11	3/9	4/4	5/1	6/6	10/0	13/0	22/0	28/0
Screw ferrule ...	2/7	3/2	4/1	4/10	5/9	7/2	11/1	14/6	24/6	31/0

Nos. 406, 407 or 408.—Second quality, each—

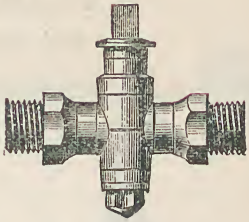
	½-in.	⅝-in.	¾-in.	1-in.
Tinned	1/11	2/6	2/11	5/4
Screwed for iron	2/2	2/9	3/2	5/7
Screw ferrule	2/5	3/1	3/6	6/3

No. 409. With union on nose.—Best quality, each—

	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.
Screw ferrule	4/2	5/3	6/4	9/2	14/11

No. 410.—Stop Cock.

Screw bottom.



No. 411.—Stop Cock.

Screw bottom, screwed for iron.

No. 410.—Best quality, each—

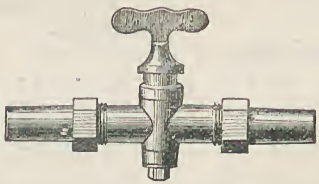
⅜-in.	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.	1¾-in.	2-in.
2/0	2/6	3/0	3/10	4/8	6/3	9/0	11/6	20/0	24/6

Usually made with crutch keys up to ⅞-in., above that size with either square head or bow keys.

	½-in.	⅝-in.	¾-in.	1-in.
Second quality...	2/0	2/4	3/0	5/4

No. 411.—Best quality, each—

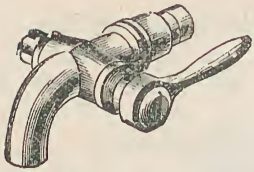
	⅜-in.	½-in.	¾-in.	1-in.	1¼-in.	1½-in.	1¾-in.	2-in.
Screwed one end, each	2/3	2/9	4/1	7/0	10/0	12/6	22/0	28/6
,, each ,, ,,	2/6	3/0	4/4	7/6	11/0	13/6	24/0	32/0



No. 412.—Stop Cock, screw bottom, with union.

Best quality.

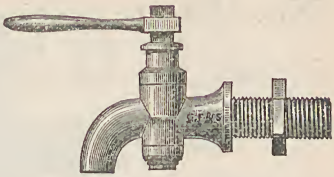
	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.
With union one end, each	3/4	4/2	5/0	7/0	7/6
,, ,, each ,, ,,	4/6	5/4	6/4	8/6	10/0



No. 413.—Butler's Pantry Cock.

Screw ferrule, with brass spanner screwed on, screw bottom.

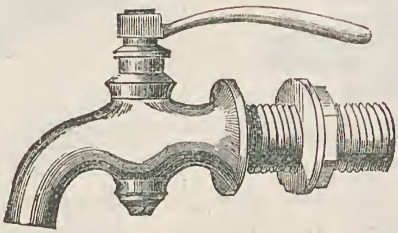
	½-in.	⅝-in.	¾-in.	1-in.
Each	4/0	5/0	5/6	10/0



No. 414.—Range Cock.

Screw bottom, with spanner.

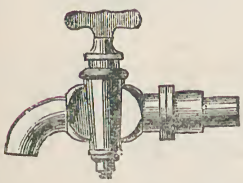
⅜-in.	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.
3/8	4/2	5/0	5/9	8/0	9/6



No. 415.—Burnished Barrel Range Cock.

Screw bottom, with spanner.

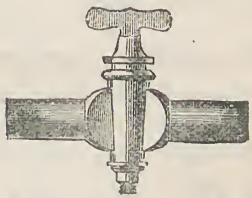
	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.
Each ...	1/8	2/6	2/11	3/9	5/2



No 416.—Full Way Bib Cock.

Screw ferrule, screw bottom.

½	⅝	¾	1	1¼	1½	2-in.
4/0	5/4	6/0	9/9	15/6	23/6	42/0



No. 417.—Full Way Stop Cock.

Screw bottom.

½	⅝	¾	1	1¼	1½	2-in.
3/8	4/8	5/0	8/6	13/6	20/0	36/0

No. 418.—Butt Cocks. Screw bottom, crutch key.

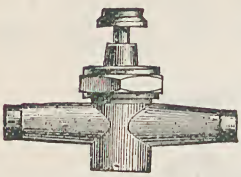
	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.	2-in.
Each	3/6	4/4	5/0	6/6	8/6	11/0	15/6	35/3

No. 419.—Lock Butt Cocks. Screw bottom.

	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.
Each ...	5/0	6/3	6/10	9/6	12/2	15/0	20/6

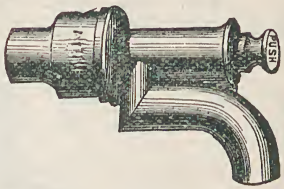
EXTRA, screwed shanks.

	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.	2-in.
Each ...	9d.	10d.	1/0	1/6	1/9	2/2	2/9	3/9



No. 420.—Spring Stop Valve.

½-in. for lead ... each 4/3
¾-in. ,, ... ,, 7/8



No. 421.—Solly's Pattern Spring Bib Cock.

	½-in.	¾-in.	1-in.
With screw ferrule, ea.	5/6	5/9	10/

No. 422.—Brass Spanners.

	⅜-in.	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.
Each ...	6d.	6d.	8d.	9d.	1/1	1/4	2/3	2/10

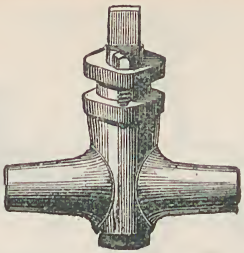
No. 423.—Iron Spanners.

	⅜-in.	½-in.	⅝-in.	¾-in.	⅞-in.	1-in	1¼-in.	1½-in.	1¾-in.	2-in.
For round way, each	9d.	9d.	11d.	1/0	1/1	1/3	1/9	2/3	3/6	4/6
For square way, each		8d.	9d.	10d.	1/0	1/6	2/0	3/3	3/9	

No. 424.—Bracket Ferrule.

For fastening Bib Cocks against walls.

	½-in.	¾-in.	1-in.
Each	10d.	1/2	1/9



No. 425.—Gland Stop Cocks.

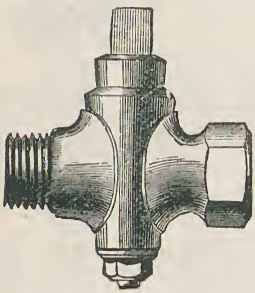
	½-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Tinned ends ... ... each	6/6	7/6	14/0	22/0	31/0	69/0
With union at one end ,,	8/6	9/6	16/0	25/0	34/0	80/0
,, on both ends ,,	10/6	11/6	18/0	28/0	37/0	91/0
One end screwed for iron ,,	7/0	8/6	15/6	24/0	33/6	73/0
Each end ,, ,, ,,	7/6	9/6	17/0	26/0	36/0	77/0

No. 426.—Gland Bib Cocks.

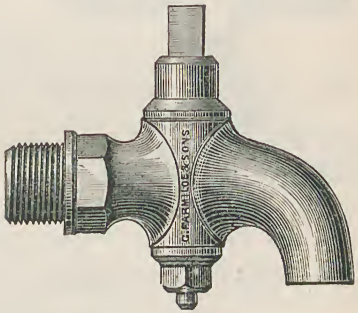
Screwed for iron... each ½-in. 7/0 ¾-in. 8/6 1-in. 15/6
Screw ferrule ... ,, ,, 7/3 ,, 9/0 ,, 16/0

No. 427.—Gland Bib Cocks. Light pattern.

Screwed for iron, each ½-in. 6/6 ¾-in. 8/6 1-in. 14/6 } including
Screw ferrule ... ,, ,, 6/9 ,, 9/0 ,, 15/6 } Spanners



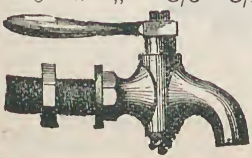
No. 428. — Gun Metal Steam Stop Cocks.



No. 429.—Gun Metal Steam Bib Cocks.

Screwed for iron, screw bottom.

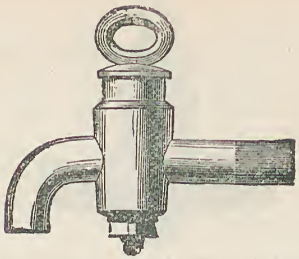
	¼-in.	⅜-in.	½-in.	¾-in	1-in.	1¼-in.	1½-in.	2-in
Bright ... each	3/6	4/3	4/10	6/9	11/6	18/0	23/0	35/0
Rough ... ,,	3/0	3/10	4/6	6/4	11/0	17/6	20/0	34/0



No. 430.—Gun Metal Range Boiler Cocks.

With squares on flange, screw bottom, with spanner.

	⅜-in.	½-in.	⅝-in.	¾-in	⅞-in	1-in
Each ...	5/0	5/6	6/4	8/0	10/0	12/6



No. 431.—Roundway Bib Cocks.

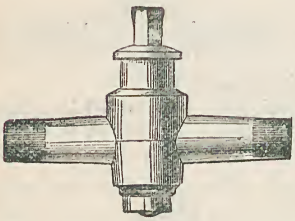
Bow keys or square heads, screw bottom.

Each ½-in 3/9 ¾-in. 5/ 1-in. 10/9 1¼-in. 18/ 1½-in. 22/6 1¾-in 33/ 2-in. 42/

Ditto, screw ferrule, screw bottom.

½-in. 4/3 ¾-in. 5/9 1-in. 12/ 1¼-in. 20/ 1½-in. 25/ 1¾-in. 37/ 2-in. 47/

No. 432.—Roundway Ball Cocks. Same prices.



No. 433. — Roundway Stop Cocks.

Screw bottom

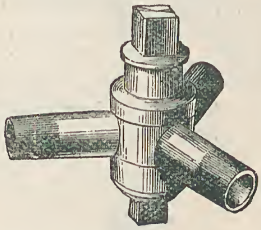
Bow keys or square heads.

Tinned ends, each—

½	¾	1	1¼	1½	1¾	2-in.
3/7	4/10	10/7	18/	22/6	33/	42/

Screwed for Iron, each—

4/1	5/8	11/6	19/4	25/6	37/	46/

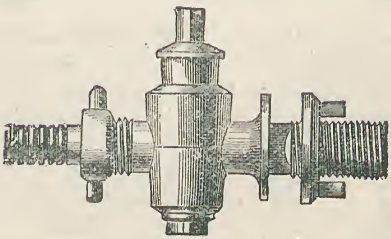


No. 434. — Three-way Cocks, Roundway.

Screw bottom.

Bow key or square head.

	1-in.	1¼-in.	1½-in.	2-in.
Each	17/0	26/0	37/6	70/0

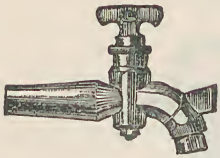


No. 435.—Roundway Vat Cocks.

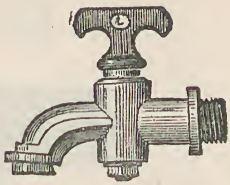
With union, screw shank and nut, bow key or square head, screw bottom.

Each ... 1-in. 18/0 1¼-in. 26 0 1½-in. 35/0 1¾-in. 45/0 2-in. 63/0

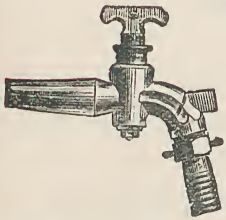
IRON COCKS.



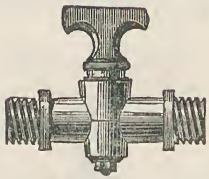
No. 436.—Butt Cock.



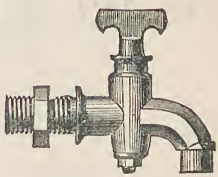
No. 437.—Bib Cock, screwed for iron pipe.



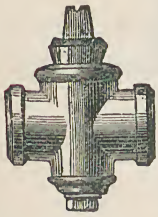
No. 438.—Butt Cock, with brass union for hose.



No. 439.—Stop Cock, screwed for iron pipe.



No. 440.—Bib Cock, with long screw and back nut.

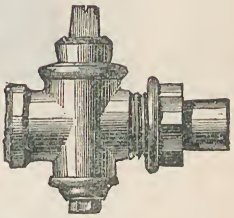


No. 441.—Stop Cock, screwed for iron pipe.

New Patent Improved Iron Butt, Bib, and Stop Cocks, with brass encased white metal plugs.

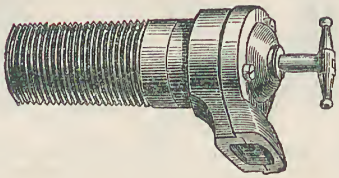
The bodies of these taps are made of iron galvanized, and the plugs of patent metal encased in brass. They will be found to work very easily, it being a well-known fact that brass and iron work well together. They will not set fast, are durable, and of little or no intrinsic value, and therefore not likely to be stolen. A cheaper cock is made with white metal plug, but these are not so durable as the above.

In ordering, please state which kind is required.



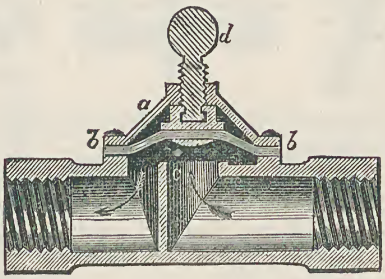
No. 442.—Stop Cock, with union for iron pipe.

No.		With Brass Encased Plugs.							With White Metal Plugs.						
		½	⅝	¾	1	1¼	1½	2-in.	½	⅝	¾	1	1¼	1½	2-in.
436	Each	1/11	2/2	2/6	4/2	7/0	9/0	—	1/6	1/10	2/0	3/4	6/0	8/0	—
437	„	2/0	—	2/6	4/10	8/0	10/0	—	1/7	—	2/0	4/0	7/0	9/0	—
438	Extra	1/3	1/5	1/6	2/2	—	—	—	1/3	1/5	1/6	2/2	—	—	extra.
439	Each	2/4	—	3/0	5/4	9/0	—	—	1/10	—	2/6	4/6	—	—	—
440	„	2/5	—	3/2	5/10	9/0	12/6	—	2/0	—	2/8	5/0	8/0	11/6	—
441	Black	2/6	—	3/6	5/3	7/6	9/0	14/6	2/0	—	3/0	4/4	6/6	7/6	12/0
441	Galv	2/9	—	3/10	5/9	8/2	9/10	15/10	2/3	—	3/4	4/10	7/2	8/4	13/4
442	Black	3/3	—	4/4	6/3	9/0	11/0	18/0	2/9	—	3/10	5/4	8/0	9/0	15/6
442	Galv.	3/6	—	4/8	6/9	9/8	11/10	19/4	3/0	—	4/2	5/10	8/8	9/10	16/10

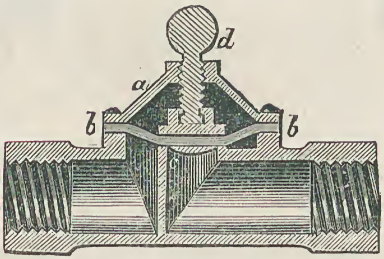


No. 443.—Hard Metal Faucet.

Each ... 2/6



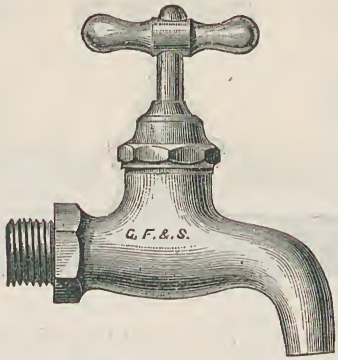
SECTION OF VALVE OPEN.



SECTION OF VALVE SHUT.

No. 444.—Carter's Patent Safety Iron Gas Valves.

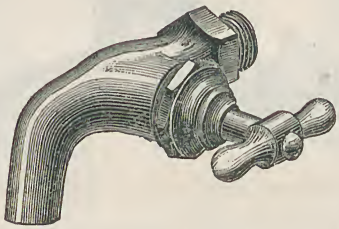
	½-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Each	2/1	2/5	3/0	6/1	7/9	14/4
Do., with union	2/9	3/6	4/1	7/9	9/5	18/2



No. 445.—American Gun Metal Bib Valves.
(G. Farmiloe & Sons, Sole Agents.)

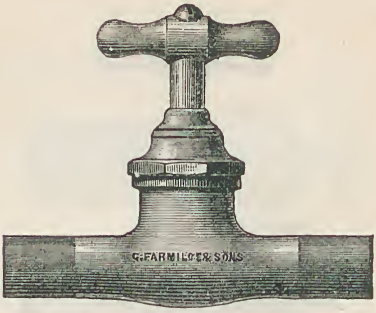
Fitted with patent fibre seatings, suitable for either hot or cold water, and high or low pressure, strongly recommended.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Tinned ... ... per doz.	30/0	33/0	42/0	54/0	98/0
Screwed for iron ,,	33/0	36/0	46/6	58/6	106/6
Screwed ferrule ,,	35/0	38/0	50/6	62/6	114/6



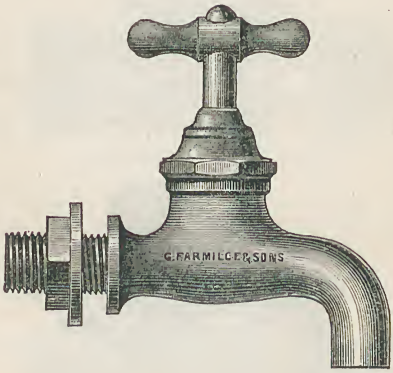
No. 446.—American Gun Metal Horizontal Bib Valves (Right or Left).

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Tinned ... ... per doz.	30/0	33/0	42/0	54/0	98/0
Screwed for iron ,,	33/0	36/0	46/6	58/6	106/6
Screwed ferrule ,,	35/0	38/0	50/6	62/6	114/6



No. 447.—American Gun Metal Stop Valves.

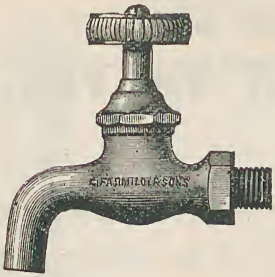
	½-in.	⅝-in.	¾-in.	1-in.
Tinned ... ... per doz.	33/0	42/0	54/0	98/0
Screwed each end for iron „	38/0	48/6	60/6	114/6



No. 448.—American Gun Metal Range Valve, with long screw and fly nut.

Per doz.	½-in. 51/0	¾-in. 78/0
With horn knobs ...per doz.	½-in. 60/0	¾-in. 90/0

Fibre Discs for repairing, ... per doz. 1/6



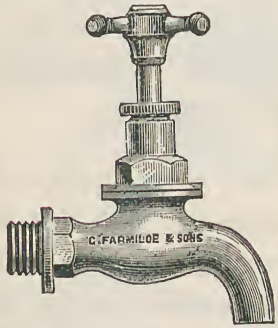
No. 448a. — American Gun Metal Bib Valve, with earthenware milled head and lettered in gold for "Hot" or "Cold."

Screwed for iron

	⅜-in.	½-in.	⅝-in.	¾-in.
Each	4/0	4/6	5/6	6/6

Screw ferrule

	⅜-in.	½-in.	⅝-in.	¾-in.
Each	4/2	4/9	5/10	6/10



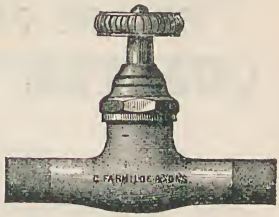
No. 448c.—Screw-Down Bib Valve, with spoke knob lettered "Hot" or "Cold."

Screwed for iron

	⅜-in.	½-in.	⅝-in.	¾-in.
Each	3/0	3/6	4/8	5/6

Screw ferrule

	⅜-in.	½-in.	⅝-in.	¾-in.
Each	3/3	3/9	5/0	5/10



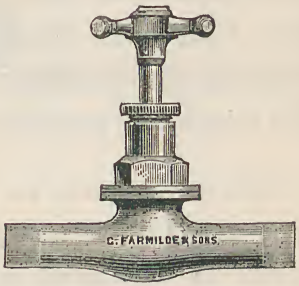
No. 448b. — American Gun Metal Stop Valve, with earthenware milled head and lettered in gold "Hot" or "Cold."

Tinned,

	⅜-in.	½-in.	⅝-in.	¾-in.
Each	3/9	4/3	5/0	6/0

Screwed for iron

	⅜-in.	½-in.	⅝-in.	¾-in.
Each	4/2	4/9	5/8	6/8



No. 448d. — Screw-Down Stop Valve, with spoke knob lettered "Hot" or "Cold."

Tinned ends

	⅜-in.	½-in.	⅝-in.	¾-in.
Each	2/9	3/3	4/6	5/3

Screwed for iron

	⅜-in.	½-in.	⅝-in.	¾-in.
Each	3/3	3/9	5/0	5/10

GEORGE FARMILOE & SONS'

QUARTER TURN VALVES.

These Valves have been designed with a view to remedying some of the more prominent defects of the ordinary screw-down taps; thus, instead of requiring several revolutions to open or close, a *quarter turn* of the lever is sufficient, the action being natural, convenient and identical with that of the familiar plug cock.

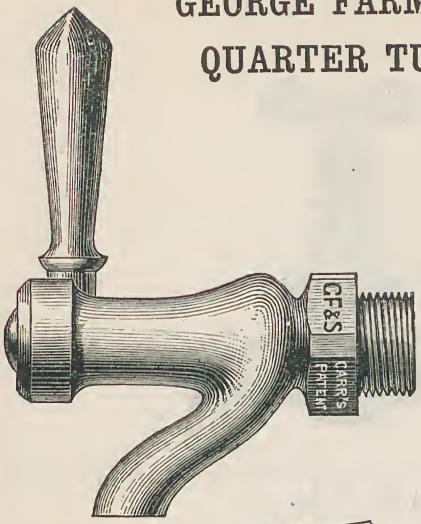
The action of closing locks the valve in such a manner as to secure it against accidental opening, either from concussion or vibration in the pipes, or even chance contact, the movement being highly characteristic, rendering it impossible to leave the valve imperfectly closed, a feature which constitutes this valve a *waste preventer* of no mean order.

The moving parts are few, simple, and unusually substantial, whilst the facilities for repairs are such that the rubber can be renewed without removing the valve, at the same time the durability is such that notwithstanding the number sold during the last three years, *not one has been returned for repairs.*

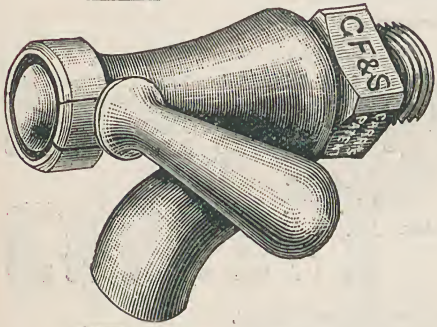
Nos. 449, A, B or C.

		⅜ in.	½ in.	¾ in.	1 in.
Screwed for iron...	each	2/6	3/2	4/6	7/9
Screw ferrule	,,	2/9	3/6	5/0	8/6

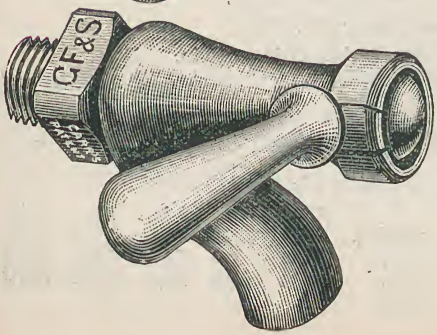
GEORGE FARMILOE & SONS' QUARTER TURN VALVES.



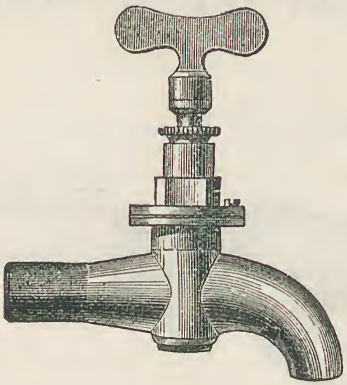
No. 449a.—Upright.



No. 449b.—Right Hand.



No. 449c. — Left Hand.



No. 449.—Screw Down Bib Cocks.

ROTHERHAM PATTERN.

Best Quality.

	⅜-in.	½-in.	⅝-in.	¾-in.	1 in.	1¼-in.	1½-in	2-in.
Plain shank... ...each	1/10	2/0	2/10	3/4	5/10	12/0	16/0	26/0
Screwed for iron... ,,	1/11	2/1	3/0	3/6	6/5	13/0	17/6	28/0
Screw ferrule ... ,,	2/0	2/3	3/3	3/9	7/0	14/8	19/0	31/6

Second Quality.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼ in.	1½ in.
Plain shank ... ... each	1/1	1/4	1/11	2/1	3/6	6/6	9/0
Screwed for iron ... ... ,,	1/2	1/5	2/2	2/4	4/0	7/3	9/9
Screw ferrule ... ... ,.	1/4	1/7	2/4	2/6	4/6	7/9	10/9

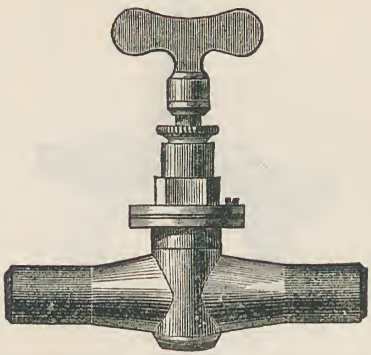
GUEST AND CHRIME'S MAKE.

Best Quality (No. 27.)

Per dozen,	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Plain shank	22/0	27/0	36/0	47/0	70/0	144/0	204/0	504/0
Screwed for iron	24/6	30/0	39/6	51/6	77/0	158/0	225/0	—
Screw ferrule	27/8	34/6	45/9	60/0	89/0	176/0	250/0	—

Second Quality (No. 28.)

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Plain shank ... ... per doz.	19/6	23/0	31/0	42/0	64/0
Screwed for iron ... ... ,,	22/0	26/0	34/6	46/6	71/0
Screw ferrule ... ... ,,	25/2	30/6	40/9	55/0	83/0



No. 450.—Screw Down Stop Cocks.

ROTHERHAM PATTERN.

Best Quality.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Plain shank ... each	1/10	2/0	2/10	3/4	5/10	12/0	16/0	26/0
Screwed for iron both ends ... ... each	2/3	2/6	3/4	4/0	7/5	14/8	19/0	30/0
Screwed for iron at one end ... ... each	2/0	2/3	3/1	3/8	6/5	13/0	17/6	28/0

Second Quality.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼in.	1½-in.
Plain shank ... ... each	1/1	1/4	1/11	2/1	3/6	6/6	9/0
Screwed for iron at both ends ,,	1/4	1/7	2/4	2/6	4/6	7/9	10/9
Screwed at one end ... ... ,,	1/2	1/5	2/2	2/4	4/0	7/3	9/9

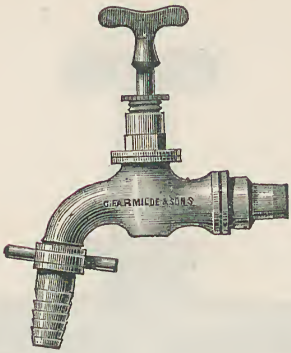
GUEST AND CHRIME'S MAKE.

Best Quality (No. 27.)

Per doz.	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Plain Shank	22/0	27/0	36/0	47/0	70/0	144/0	204/0	504/0
Screwed male ends... ...	27/0	33/0	43/0	56/0	84/0	172/0	246/0	—
Do. female do.	26/0	31/6	42/0	55/0	81/0	161/0	227/0	—

Second Quality (No. 28).

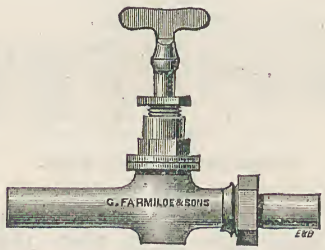
	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Plain snank ... ... per doz.	19/6	23/0	31/0	42/0	64/0
Screwed male ends ... ... ,,	24/6	29/0	38/0	51/0	78/0
,, female ,, ... ,,	23/6	27/6	37/0	50/0	75/0



No. 451.—Screw Down Bib Cocks, with union on nose.

Best Quality.

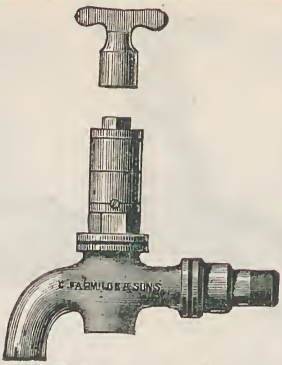
	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.
Screwed for iron, each	2/7	3/3	4/3	5/5	8/1	16/4	23/5
Screw ferrule ... „	2/11	3/7	4/9	6/1	9/1	17/10	25/6



No. 452.—Screw Down Stop Cocks, with union.

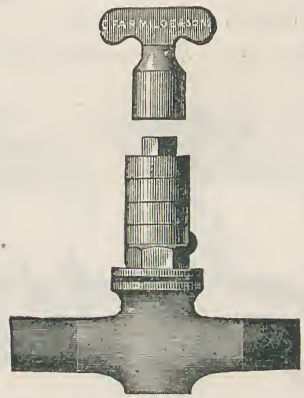
Best Quality.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.
With union on one end ... ... each	2/5	3/0	3/9	4/6	6/6	15/6	21/0
Do., both ends „	3/0	3/6	4/3	5/0	7/6	17/6	24/0



No. 453.—Screw Down Bib Cocks, with strong guards and loose keys.

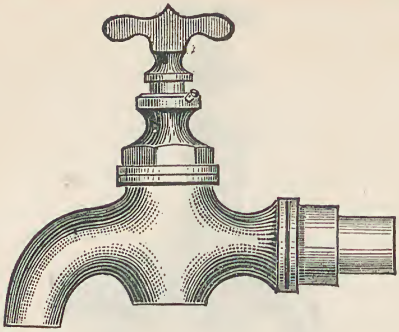
Best Quality—	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.
Screwed for iron ... each	3/2	3/9	4/6	5/6	8/10	17/0
Screw ferrule ... ,,	3/4	4/0	4/10	5/10	9/4	18/0



No. 454.—Screw Down Stop Cocks, with strong guards and loose keys.

Best Quality—	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.
Tinned ends ... ... each	3/0	3/4	4/4	5/2	8/0	15/0
Screwed for iron each end ,,	3/4	4/0	—	5/10	9/4	18/0

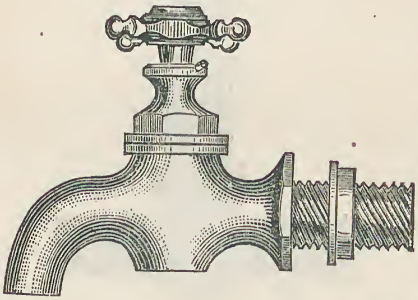
NOTE.—The above Cocks were designed specially for School use, and are therefore often described as the "School Board Pattern Cocks."



No. 455. — McNeil's Patent High Pressure Cocks, with "Lift Valves."

Suitable for hot or cold water, supplying a full flow at half turn.

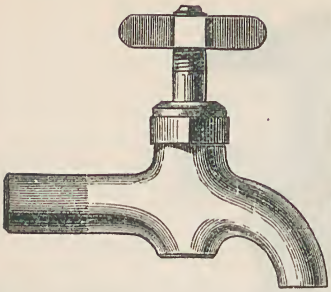
	½-in.	⅝-in.	¾-in.	1-in.
Bib or stop cocks, plain shanks ... each	2/6	3/6	4/3	6/6
Bib cocks, screw ferrule, or stop cock, screwed for iron ... ... each	2/8	3/8	4/6	7/0



No. 456.—McNeil's Patent Range Cocks, lettered hot or cold ... ... each

	½-in.	⅝-in.	¾-in.
	4/3	5/3	6/3
Gun Metal ditto, highly finished „	5/0	6/0	7/3

Each 3d. less if screwed for iron, without fly nut.



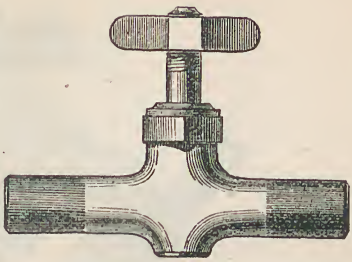
No. 457.—Brighton Pattern High Pressure Bib Valves.

Screw ferrule, finished, each—

⅜	½	⅝	¾	1	1¼-in.
3/3	3/9	4/8	5/6	10/0	14/6

Screwed for iron, rough—

2/10 3/3 4/0 4/9 8/2

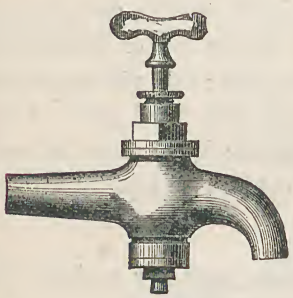


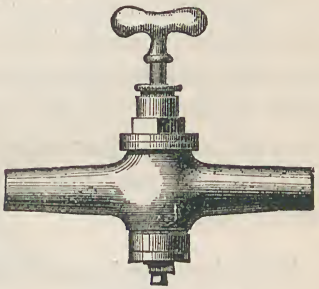
No. 458.—Brighton Pattern High Pressure Stop Valves.

	⅜	½	⅝	¾	1-in.
Finished	2/9	3/3	4/0	4/6	8/0
Rough	2/6	3/0	3/8	4/5	7/6

Screwed for iron, rough—

2/10 3/4 4/3 5/0 8/8





No. 459.—Improved High Pressure Bib and Stop Valves.

With stuffing boxes and double valve, with self-acting shut-off action, for repairs without turning off the water.

Best Quality.

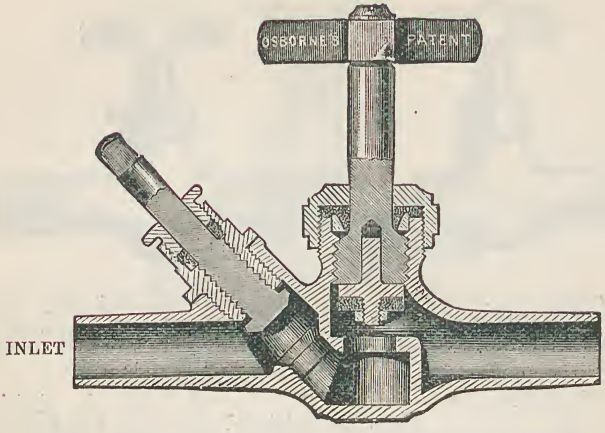
Plain shank... each ⅜-in. 2/9 ½-in. 3/7 ⅝-in. 4/2 ¾-in. 5/9

Medium Quality.

Plain shank... each ⅜-in. 2/6 ½-in. 3/1 ⅝-in. 3/9 ¾-in. 5/0

EXTRA.

	⅜-in.	½-in.	⅝-in.	¾-in.
Stops screwed each end for iron ... ... each	/4	/5	/8	/9



No. 460.—OSBORNE'S Patent Regulating Bib or Stop Valves.

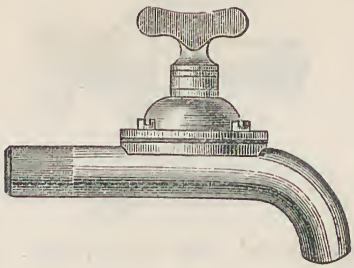
These are recommended as being simple, durable, and effective. A small valve is placed in the inlet on the top of the tap, to regulate the pressure of water from the main; this will ensure the proper working of the ball valves and taps in all parts of the house, and will also prevent waste of water; by closing this small valve, the large valve may be taken out and be repaired without drawing the mains.

These taps can be fixed underground with key upright, and can also be fixed in angles and on ceilings very neatly.

They are made of the best quality metal, and according to the Water Companies' regulations.

The small key should not be left on the tap when fixed.

Bib or stop cocks—	½-in.	⅝-in.	¾-in.	1-in.
Plain shanks ... ... each	4/0	4/9	6/0	9/0
Screwed for iron one end „	4/3	—	6/6	9/6
„ „ each end „	4/6	—	7/0	10/0



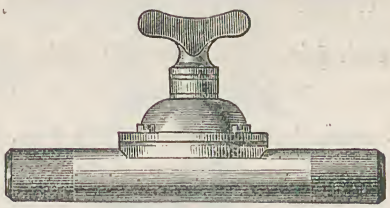
No. 461.—Diaphragm Bib Valves.

Best Quality.

		⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.
Plain shank ...	... each	2/6	3/0	3/10	4/4	6/9	16/6
Screwed for iron	... „	2/9	3/3	4/0	4/8	7/6	17/6
Screw ferrule ...	... „	3/0	3/6	4/6	5/0	8/4	18/6

Medium Quality.

		⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Plain shank ...	... ... each	1/4	1/8	1/11	2/4	4/7
Screwed for iron	... .. „	1/5	1/10	2/2	2/7	5/0
Screw ferrule ...	... ... „	1/7	2/1	2/6	2/11	5/6



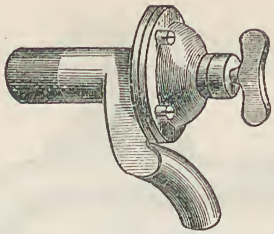
No. 462.—Diaphragm Stop Valves.

Best Quality.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1-in.	2-in.
Plain shank, each	2/6	3/0	3/10	4/4	6/9	15/6	21/0	35/0
Screwed for iron, each	3/2	4/0	4/9	5/6	8/9	19/0	24/0	—

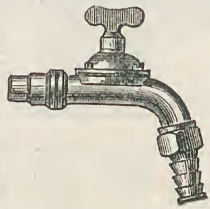
Medium Quality.

		⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Plain shank ...	... ... each	1/4	1/8	1/11	2/4	4/7
Screwed for iron	... ... „	1/7	2/1	2/6	2/11	5/6



No. 463.—Horizontal Diaphragm Valves.

		¾-in.	½-in.	⅝-in.	¾-in.	1-in.
Plain shank...	each	3/9	4/3	4/9	5/9	8/6
Screwed for iron	,,	4/0	4/6	5/3	6/3	9/6
Screw ferrule	,,	4/3	4/9	5/9	6/9	10/6



No. 464.—Diaphragm Bib Valves.

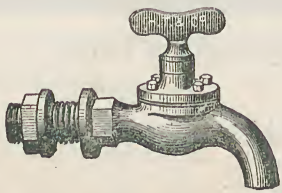
WITH UNION FOR HOSE.

Best Quality.

Plain shank... each ½-in. 5/0 ⅝-in. 6/0 ¾-in. 7/0 1-in. 11/0
Screw ferrule „ „ 5/9 „ 6/6 „ 7/10 „ 12/6

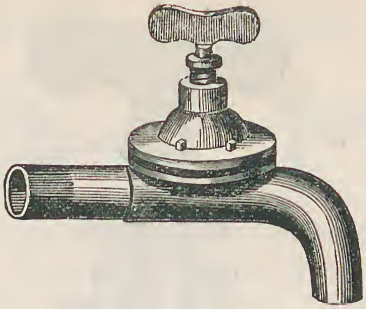
Medium Quality.

Plain shank ...each ½-in. 2/3 ⅝-in. 2/8 ¾-in. 3/4 1-in. 6/0
Screw ferrule... „ „ 2/8 „ 3/3 „ 4/0 „ 6/9



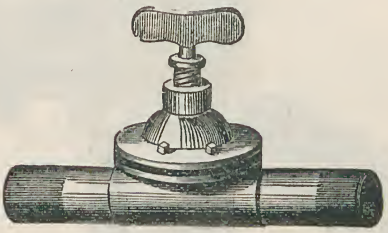
No. 465.—Diaphragm Range Boiler Valve.

With screwed shank and nut,
each ½-in. 5/3 ⅝-in. 5/9 ¾-in. 6/9 1-in. 9/6
„ horn knob „ „ 5/9 „ 6/5 „ 7/6 „ 10/4



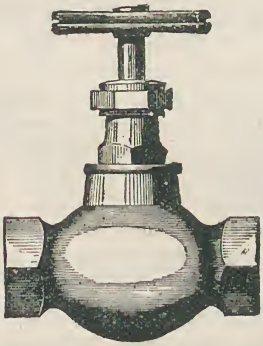
No. 466.—Paragon Bib Valves.

Plain shank ...	each	⅜-in.,	1/4	½-in.,	1/8	⅝-in.,	1/11	¾-in.,	2/4	1-in,	4/7
Screwed for iron	,,	,,	1/5	,,	1/10	,,	2/2	,,	2/7	,,	5/0
Screw ferrule ...	,,	,,	1/7	,,	2/1	,,	2/6	,,	2/11	,,	5/6



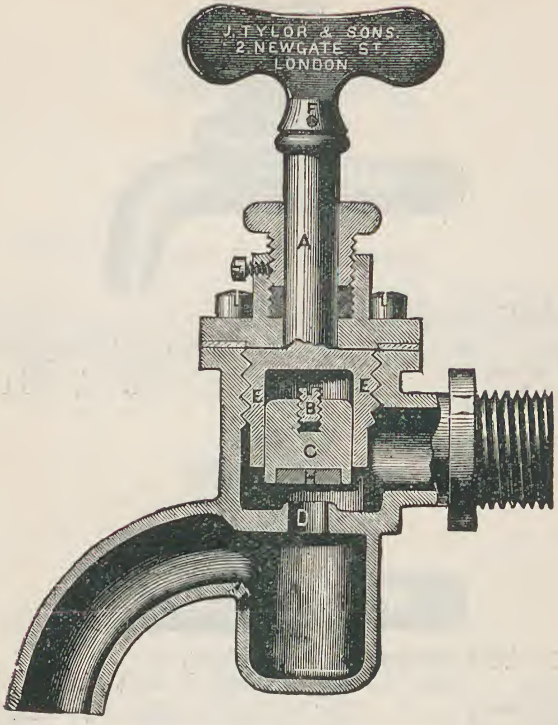
No. 467.—Paragon Stop Valves.

Plain shank ...	each	⅜-in.	1/4	½-in.	1/8	⅝-in.	1/11	¾-in.	2/4	1-in.	4/7
Screwed for iron each end	,,	,,	1/7	,,	2/1	,,	2/6	,,	2/11	,,	5/6



No. 468.—Gun Metal Wheel Top Steam Stop Valves.

	½-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Rough ... ... each	4/9	6/6	9/0	12/6	15/0	26/0
Bright ... ... ,,	6/2	8/0	10/10	15/0	17/6	29/0



No. 472.—J. Tylor & Sons' Patent Screw-Down Loose Valve "Waste-Not" Tap.

With Screw Stuffing Box for Pressures above 60 feet.

In conformity with Waterworks Regulations and the Metropolis Water Act, 1871, and allowed by the New River and other Water Companies.

		½-in.	⅝-in.	¾-in.	1-in.
Screwed iron pipe gauge	... each	7/6	10/0	13/0	17/0
Screw ferrule for lead pipe	... „	7/9	10/4	13/6	18/0

The larger sizes are recommended for very low pressure.

On account of the scrapings from joints, &c., it is advisable to take out the falling plug and wipe it when first fixed, and this should also be done when it has remained unused or in stock for any length of time, or when the water has any particles of foreign matter in it.

The smallest quantity can be drawn from these valves, but if left open they close of themselves, after having discharged the regulated quantity, which is generally about 2 gallons.

They can be adjusted to pass more if necessary, but are kept in stock for 2 gallons.

BALL VALVES.

No. 473.—Equilibrium Ball Valve (Lambert's pattern).

Best quality, with copper balls.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Screw ferrule, each	2/9	3/3	3/9	4/3	9/0	14/0	22/0	45/0
Screwed for iron, each	2/7	3/0	3/6	3/11	8/6	13/6	21/0	43/0

Second quality, with copper ball.

	½-in.	⅝-in.	¾-in.	1-in.
Screw ferrule ... ... each	2/6	3/0	3/6	6/9
Screwed for iron ... ... „	2/4	2/10	3/3	6/5

Second quality, with zinc ball.

	½-in.	⅝-in.	¾-in.
Screw ferrule... ... ... each	2/0	2/6	3/0
Screwed for iron ... ... „	1/10	2/4	2/9

Cup leather for repairing above—

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Per dozen	/9	1/0	1/0	1/3	1/6	2/0	3/0	4/0

India-rubber Washers for repairing above—

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Per dozen	/6	/6	/6	/9	/9	1/0	1/6	2/6

No. 474.—Equilibrium Ball Valves (Underhay's pattern).

Best quality, with copper balls.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Screw ferrule, each	3/6	4/3	5/6	6/6	9/6	14/0	19/0	38/0
Screwed for iron, each	3/4	4/0	5/3	6/2	9/0	13/6	18/0	36/0

No. 475.—Paragon Ball Valve.

Best quality, with copper balls.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Screw ferrule ... ... each	2/9	3/2	3/9	4/4	8/0
Screwed for iron ... ... ,,	2/7	2/11	3/0	4/0	7/6

No. 476.—Paragon Ball Valve (new pattern, extra strong).

Best quality, with copper balls.

	⅜-in.	½-in.	¾-in.	1-in.
Screw ferrule ... ... each	2/9	3/4	4/6	9/0
Screwed for iron ... ... ,,	2/7	3/1	4/2	8/6
With fly nut and union ... ... ,,	3/9	4/4	—	—

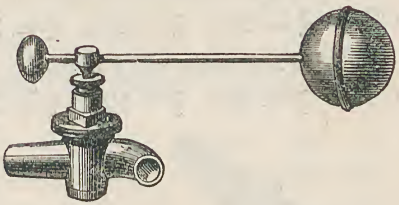
No. 477.—Croydon Ball Valve (Shanks' pattern).

Best quality, with copper balls.

	⅜-in.	½-in.	¾-in.	1-in	1¼-in.	1½-in.
Screw ferrule ... each	2/3	2/9	3/6	6/0	16/0	21/0
Screwed for iron... ,,	2/1	2/6	3/2	5/6	15/0	19/6
With fly nut and union ,,	3/3	3/9	—	—	—	—

No. 478.—Compound Lever Ball Valve (CHANDLER'S pattern).
Best Quality, with copper balls.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Screw ferrule, each	3/2	3/9	4/9	5/3	11/0	16/0	22/0	40/0
Screwed for iron „	3/0	3/6	4/6	4/11	10/6	15/6	21/0	38/0



No. 479.—Loose Valve Ball Cock (GUEST & CHRIMES' pattern).
Best Quality, with copper balls.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Plain shank ... each	3/9	4/4	5/6	6/9	9/5	19/0	26/	57/
Screwed for iron „	4/0	4/7	5/10	7/2	10/0	20/2	27/9	—
Screw ferrule .. „	4/3	5/0	6/4	7/10	11/0	21/8	29/10	—

No. 480.—LAMBERT'S Improved Ball Valve, for high pressure.

	½-in.	⅝-in.	½-in.	⅝-in.	¾-in.	1-in.
Screw ferrule, with copper balls, each	3/3	3/9	4/6	5/6	6/6	12/9

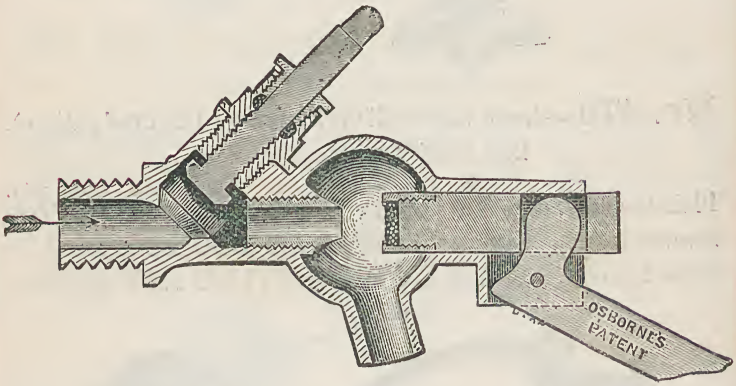
No. 481.—Climax Ball Valve (DAY's pattern).

With copper balls, screw ferrule.

Each $\frac{3}{8}$-in 2/0 $\frac{1}{2}$-in. 2/4 $\frac{5}{8}$-in. 3/3 $\frac{3}{4}$-in. 3/6 1-in. 5/3

With zinc balls, screw ferrule.

Each $\frac{3}{8}$-in. 1/8 $\frac{1}{2}$-in. 2/0 $\frac{5}{8}$-in. 2/9 $\frac{3}{4}$-in. 3/0 1-in. 4/6

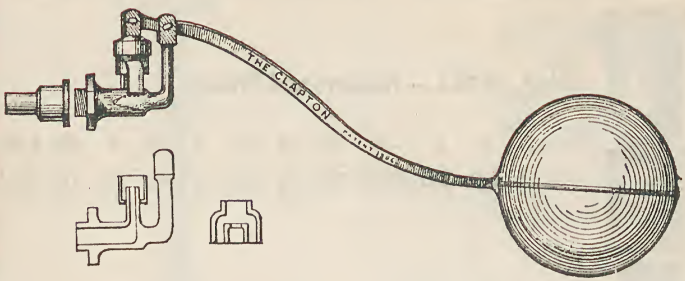


No. 482.—Regulating Ball Valve (OSBORNE's pattern).

This is similar in action to the Stop Cock shown on page 241, and can be regulated to suit any pressure.

Best Quality, with copper balls.

Screw ferrule ... each	$\frac{3}{8}$-in. 4/0	$\frac{1}{2}$-in. 5/0	$\frac{3}{4}$-in. 7/0	1-in. 11/6
Screwed for iron „	„ 3/9	„ 4/9	„ 6/6	„ 11/0



No. 483.—The Clapton Ball Valve. (Patent No. 1396.)

With india-rubber disc above the metal seating, so that no sediment can possibly cause leakage. Suitable for high pressure.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Screw ferrule, with copper balls, each	2/6	2/8	3/2	3/10	8/0
„ „ zinc „ „	2/3	2/4	2/10	3/4	7/3

No. 484.—Balls and Stems.

Copper.

	⅜-in.	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.	2-in.
Each...	1/2	1/3	1/5	1/6	2/3	2/9	4/3	7/3	13/0

Zinc.

	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
Each	8d.	9d.	10d.	11d.	1/7

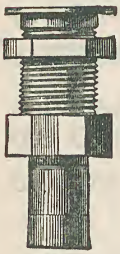
PLUMBERS' BRASS WORK.

No. 485.—Washers and Wastes.

	½	¾	1	1¼	1½	1¾	2	2½	3	3½	4-in.
Each	1/2	1/3	1/10	2/6	3/	3/9	4/4	8/	13/	15/	21/

No. 486.—Washers and Wastes.

With fly nut and union.



	½	¾	1	1¼	1½	1¾	2	2½	3	4-in.
Each	3/2	3/4	5/	6/6	8/6	10/	13/6	20/	30/	48/

No. 487.—Washers and Plugs.

	½	¾	1	1¼	1½	1¾	2	2½	3	3½	4-in.
Each	1/2	1/3	1/10	2/4	3/	3/9	4/4	8/	13/	15/	21/

No. 488.—Washers and Plugs.

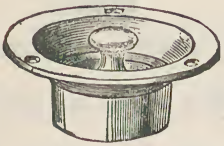
With fly nut and union.

	½	¾	1	1¼	1½	1¾	2	2½	3	3½	4-in.
Each	3/2	3/4	5/	6/6	8/6	10/	13/6	20/	30/	36/	48/

¾ Light ditto, for Wash Basins, 2/3 each.

No. 489.—Milk Washers and Plugs.

	½	¾	⅞	1	1¼-in.
Each	1/8	2/4	2/9	3/6	4/6

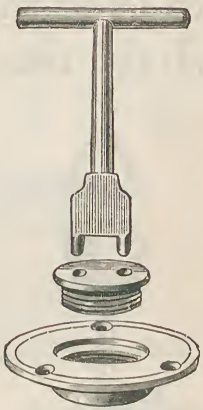


No. 490. — Wash Tub Washers and Plugs.

	1¼	1½	2-in.
Each	2/9	3/0	4/0

No. 491.—Butler's Pantry Washers and Plugs.

	1¼	1½	2	2½	3-in.
Each	1/8	1/9	2/2	3/6	5/0



No. 492.—Screwed Deck Valves. All sizes.

	1½	2	2½	3-in.
Each	3/0	3/9	4/6	6/6

Keys, 1/6 extra.

No. 493.—Deck Valve.

1½-in., 3/0 each.

No. 494.—Short Spindle Valves.

Ground in, each—

½	¾	1	1¼	1½	1¾-in.
1/2	1/3	1/8	2/4	3/3	4/3

2	2½	3	3½	4-in.
5/6	7/0	12/0	15/0	22/6

No. 496.—Loug Spindle Valves.

Leathered or ground in, each—

1-in.	1¼-in.	1½-in.	1¾-in.	2-in.
3/0	3/9	4/4	5/6	7/3

2½-in.	3-in.	3½-in.	4-in.
10/0	15/6	19/0	25/0

No. 495.—Short Spindle Valves.

Ground in.

Screwed for iron pipe, each—

½-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
1/3	1/8	2/1	3/2	4/0	7/0

No. 497.—Spindle Valves.

With fly nut and union.

¾-in.	1-in.	1¼-in.	1½-in.	1¾-in.
3/6	5/0	6/9	8/6	10/0

2-in.	2½-in.	
13/6	20/0	each.

Air pipe to ditto, extra, 6d. each.

No. 498.—Boiler Screws.

Single nut.

½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.	2-in.	2½-in.	3-in.	4-in.
1/	1/3	1/5	2/	2/2	3/	3/10	6/6	11/	14/6	27/

2nd quality ... each ½-in. 7d. ⅝-in. 9d. ¾-in. 11d. 1-in. 1/8

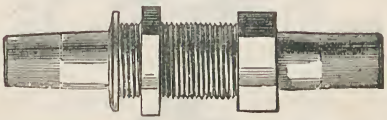
Double Nut.

	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.	2-in.
Each	1/3	1/6	1/9	2/3	2/8	3/5	4/4	8/9

No. 499.—Boiler Screws.

With extra long thread for slate cisterns.

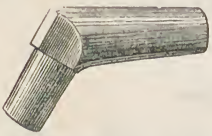
	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.	2-in.	3-in.
Each	1/4	1/8	2/0	2/6	2/10	4/0	5/2	9/0	16/6



No. 500.—Boiler Screws.

With union.

Each ½-in. 2/8 ⅝-in. 3/0 ¾-in. 3/4 1-in. 4/6 1¼-in. 6/3 1½-in. 8/3



No. 501.—Driving Ferrules

½	⅝	¾	1	1¼	1½	2-in.
8d.	9d.	1/0	2/2	3/0	4/6	10/0

No. 502.—Union Screws.

One end for iron, other end tinned.

½-in. 10d. ¾-in. 1/1 1-in. 2/0

No. 503.—Strong Union Joints, for lead pipe.

½-in.	⅝-in.	¾-in.	⅞-in.	1-in.	1¼-in.	1½-in.	1¾-in.	2-in.	2½-in.	3-in.
1/4	1/6	2/1	2/5	2/8	4/3	5/0	6/0	7/6	11/6	15/9

No. 504.—Bent Union Screw.

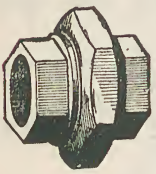
With nut and swivel.

	⅜-in.	½-in.	¾-in.	1-in.	1¼-in.	1½-in.
Each	1/6	1/9	2/8	3/9	6/6	9/0
Second quality	...	...	⅜-in. /10	½-in. 1/0	¾-in 1/6	

No. 505.—Strong Union Joints.

One end for iron pipe.

	½	¾	1	1¼	1½	2	2½-in.
Each	1/9	2/8	3/9	5/0	6/3	9/0	13/6



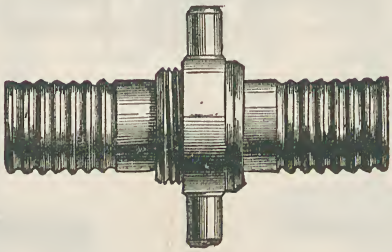
No. 506.—Strong Gun Metal Steam Unions.

Screwed outside.

	½-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Each	3/0	4/0	5/0	7/0	8/10	14/6

Screwed inside.

	½-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
Each	2/3	3/0	4/0	5/6	7/9	12/0



No. 507.—Strong Swivel Hose Screws.

	1	1¼	1½	1¾	2	2½	3	3½-in.
Each ...	3/6	3/10	4/8	5/6	7/2	8/10	14/6	21/0

The 2½ is cut to the London Fire Brigade gauge.

This and larger sizes have lugs on male screws.

Light Swivel Hose Screws.

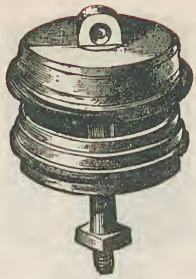
For connecting rubber or canvas pipe.

	½-in.	⅝-in.	¾-in.	1-in.
Each	1/0	1/3	1/8	2/5

Tying Unions in Hose.

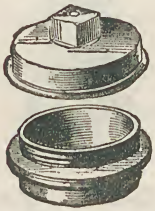
With strong copper wire.

	1-in.	1¼-in.	1½-in.	1¾-in.	2-in.	2½-in.	3-in.
Each...	1/0	1/3	1/6	1/9	2/0	2/6	3/0



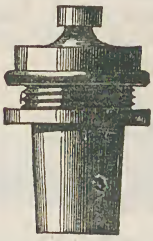
No. 508.—Shower Bath Valves.

Each 2-in. 2/9 2½-in. 3/9 3-in. 5/0 3½-in. 7/6 4-in. 11/0



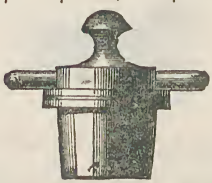
No. 509.—Light Brass Caps and Screws.

	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6-in.
Each	10d.	1/0	1/3	1/8	2/2	3/2	4/6	5/9	7/6	8/9	11/6	14/6



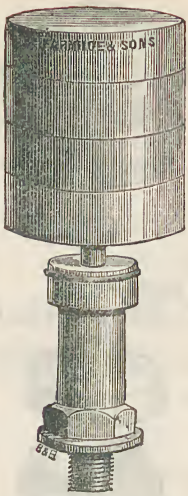
No. 510.—Strong Brass Caps and Screws.

	1	1¼	1½	1¾	2	2¼	2½	3	3½	4-in.
Each	2/9	3/9	4/6	6/3	6/9	7/6	9/0	14/0	21/0	27/0



No. 511.—Strong Brass Caps and Screws, with lugs.

	¾	1	1¼	1½	1¾	2	2½	3	4-in.
Each	2/3	2/9	3/3	3/9	4/6	5/6	7/6	9/0	10/6



No. 512.—Improved Dead Weight Safety Valve.

For preventing explosions in Kitchen Range Boilers.

The action of this valve is not dependent upon any lever or hinged joint, and these points of friction being done away with, it is not liable to set fast; it is loaded to counter-balance 120-feet pressure, each of the four weights being adjusted to counterbalance 30-feet pressure

Screwed for ½-in. iron pipe ... ... each 8/6

No. 513.—Check Valves for Range Boilers.

Each... ... ... ¾-in. 5/0 1-in. 6/0

No. 514.—Caps and Linings.

Caps screwed for iron, linings extra long, for wiped joints.

Each ... ⅜-in. 6d. ½-in. 9d. ¾-in. 1/3 1-in. 1/8

CORRUGATED IRON.

Galvanized Tinned Corrugated Sheets.

All sheets are eight 3 inch corrugations in width, that is, each covers 2 feet wide when fixed, allowing for laps, and are kept in stock, 5, 6, 7 and 8 feet long in all gauges. 9 and 10 feet sheets are also stocked in 24 and 27 gauge, and can be supplied in the other gauges at a short notice.

The approximate weights are given below, and will be found sufficient in quoting for ordinary roofing work, but estimates and drawings can be supplied at short notice for more complicated specifications, for iron churches, houses and buildings of all kinds, inclusive of fixing in any part of the Kingdom. In such instances, all possible information should be given so as to ensure an accurate estimate being furnished.

Gauge.	Weight per Sheet 6 ft. by 2 ft.	Weight per Square 100 superl. ft. cwt. qrs. lbs.	£	s.	d.	
No. 18	about 30 lb.	about 2 2 0		—		per cwt.
,, 20	,, 25 ,,	,, 1 3 20		—		,,
,, 22	,, 21 ,,	,, 1 2 20		—		,,
,, 24	,, 17 ,,	,, 1 1 14		—		,,
,, 27	,, 12 ,,	,, 1 0 9		—		,,

EXTRAS.

Over 8 feet and not exceeding 9 feet long	1/0	per cwt.
,, 9 ,, ,, ,, 10 ,, ...	2/0	,,
Punching one side and one end...	1/0	,,
Curving sheets, ordinary	1/0	,,
,, ,, verandah or O.G. shape	7d.	per sheet.

Special prices given for quantities not less than 1 ton, direct from the works.

GALVANIZED CISTERNS, &c.

No. 515.—Galvanized Open Cistern, stock sizes.

Galls.	Lgth. ft. in.	Width. ft. in.	Dpth. ft. in.	Strong. Each.	⅛ plate bare. Each.	⅛ plate full. Each.	⅜ plate. Each.
25	2 0	1 5	1 5	£0 13 0	£1 4 0	£1 6 0	—
30	2 0	1 6	1 7	0 15 0	1 8 0	1 10 0	—
40	2 3	1 8	1 8	0 18 0	1 12 0	1 14 0	—
50	2 5	1 10	1 10	1 1 0	1 16 0	1 17 0	—
60	2 6	1 11	2 0	1 5 0	1 19 0	2 2 0	—
70	2 8	2 2	2 0	1 7 0	2 2 0	2 6 0	—
80	2 10	2 3	2 0	1 9 0	2 5 0	2 10 0	—
100	3 2	2 3	2 3	1 14 0	2 12 0	2 17 0	—
125	3 4	2 7	2 4	1 17 0	2 19 0	3 5 0	—
150	3 6	2 7	2 8	2 7 0	3 7 0	3 11 0	—
200	3 10	2 11	2 11	2 19 0	3 19 0	4 1 0	—
250	4 2	3 3	3 0	3 14 0	4 10 0	4 18 0	—
300	4 6	3 7	3 0	4 5 0	5 2 0	5 9 0	—
400	5 10	3 9	3 0	—	5 12 0	7 2 0	£10 0 0
500	6 6	4 1	3 0	—	7 2 0	8 1 0	11 12 0
600	7 6	4 1	3 2	—	8 13 0	9 3 0	13 4 0
700	8 3	4 1	3 4	—	9 13 0	10 9 0	14 9 0
800	8 3	4 5	3 6	—	10 15 0	11 8 0	15 15 0
900	8 3	4 11	3 8	—	11 15 0	12 5 0	17 3 0
1000	8 3	4 11	4 0	—	12 8 0	13 4 0	18 10 0

Galvanized loose covers for above.

25	30	40	50	60	70	80	100	125	150	200	250	300 galls.
2/0	2/3	2/9	3/3	4/0	4/6	4/9	5/3	6/3	7/3	9/0	12/0	15/0 each.

No. 517.—Galvanized Hot Water Tanks, with manhole and cover bolted down.

Galls.	Length. ft. in.	Width. ft. in.	Depth. ft. in.	Light. Each.	⅛ plate bare. Each.	⅛ plate full Each.
20	1 8	1 3	1 6	£1 3 0	£1 8 0	£1 11 0
25	2 0	1 5	1 5	1 4 0	1 14 0	1 16 0
30	2 0	1 6	1 7	1 6 0	1 16 0	1 18 0
40	2 3	1 8	1 8	1 10 0	1 18 0	2 1 0
50	2 5	1 10	1 10	1 14 0	2 3 0	2 6 0
60	2 6	1 11	2 0	—	2 6 0	2 9 0
80	2 10	2 3	2 0	—	2 16 0	3 2 0
100	3 2	2 3	2 3	—	3 2 0	3 7 0

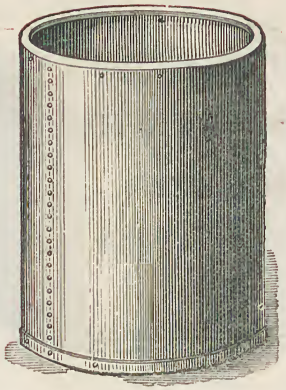
When the quality required is not stated on the order, medium thickness (⅛ plate bare) is always supplied.

The whole of top bolted down, charged extra. Manhole packed with india-rubber ring, 2/6 extra.

No. 519.—Galvanized Wrought Iron Supply Cisterns.

Size	12 by 6 by 12 s. d.	15 by 6 by 12 s. d.	18 by 6 by 13 s. d.
With covers ...each	4 0	5 0	6 0
Without covers ... „	3 8	4 6	5 6

Size	7 16 by 10 by 12 s. d.	11 18 by 12 by 15 s. d.	20 gallons. 20 by 15 by 18 s. d.
With covers ...each	6 8	9 6	13 0
Without covers ... „	6 0	8 6	11 6

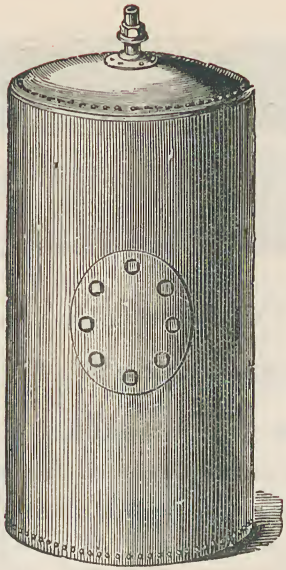


No. 520.—Galvanized Iron Circular Cisterns.

Galls.	Diam. ins.	Height. ins.		FOR WATER. Open.	FOR WATER. Loose Covers. Extra.	FOR OIL. Open.	FOR OIL. With fixed cover, brass bung, and key.
5	11	17½	each	—	—	—	6/0
10	14	21	,,	—	—	—	9/0
15	16	22	,,	9/0	1/9	9/6	12/0
20	18	24	,,	11/0	2/0	12/0	15/0
30	19½	30	,,	14/0	2/6	16/0	20/0
40	21	33	,,	17/0	3/0	20/0	24/0
50	23	35	,,	21/0	3/6	24/0	28/0
60	25	36	,,	25/0	4/0	27/0	32/0
80	27	42	,,	30/0	4/9	36/0	40/0
100	28	48	,,	35/0	5/3	40/0	45/0

Brass Bib Cocks for above, including flange and fixing—

Each ... ... ½-in. 4/0 ¾-in 5/6. 1-in. 8/6



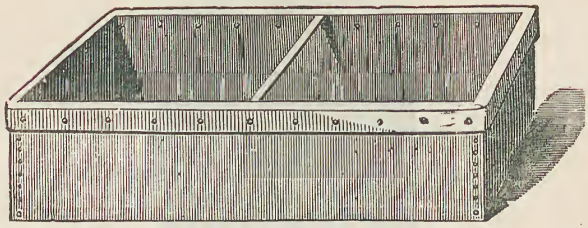
No. 521.—Galvanized Round Hot Water Cylinders.

Galls.	Diameter.	Height.	Light.	Strong.	⅛-in, Bare.	⅛-in. Full.
15	14-in.	28-in.	25/6	28/0	32/0	35/0
18	14-in.	33-in.	27/6	30/0	34/0	38/0
20	14-in.	36-in.	29/0	31/0	35/6	39/6
25	16-in.	36-in.	32/0	35/0	39/0	43/6
30	17-in.	36-in.	35/6	38/0	43/0	47/6
33	18½-in.	36-in.	37/6	40/0	45/0	49/6
36	20-in.	36-in.	39/6	43/0	47/0	52/0
39	20-in.	39-in.	—	—	50/0	55/0
42	20-in.	42-in.	—	—	52/0	57/0
45	20-in.	45-in.	—	—	54/0	59/0
48	20-in.	48-in.	—	—	56/0	62/0

Brass Unions for above, including flange and fixing—
Each ... ... ¾-in. 3/6 1-in. 4/6

No. 522.– Cast Iron Supply Cisterns and Covers.

	Length.	Width.	Depth.		Black.	Galvanized.
No. 1.	12-in.	6-in.	9-in	each	3/6	5/0
,, 2.	12-in.	6-in.	12-in.	,,	4/0	7/0
,, 3.	15-in.	6-in.	12-in.	,,	4/6	8/0
,, 4.	18-in.	6½-in.	12½-in.	,,	7/0	12/0



No. 522a.—Wrought-iron Cattle Troughs.

With strong safe edge, angle iron top, 18 in. wide by 15 in. deep.

	Strong.			⅛ plate bare.			⅛ plate full.		
Length.	Galvanized.	Painted.		Galvanized.	Painted.		Galvanized.	Painted.	
	£ s. d.	£ s. d.		£ s. d.	£ s. d.		£ s. d.	£ s. d.	
3 feet	1 5 0	1 1 0		1 13 0	1 4 0		1 16 0	1 6 0	
4 „	1 10 0	1 6 0		2 2 0	1 9 0		2 6 0	1 12 0	
5 „	1 16 0	1 11 0		2 11 0	1 15 0		2 16 0	1 18 0	
6 „	2 2 0	1 16 0		2 19 0	2 0 0		3 5 0	2 4 0	
7 „	2 8 0	2 1 0		3 7 0	2 5 0		3 14 0	2 10 0	
8 „	2 14 0	2 6 0		3 15 0	2 11 0		4 3 0	2 16 0	

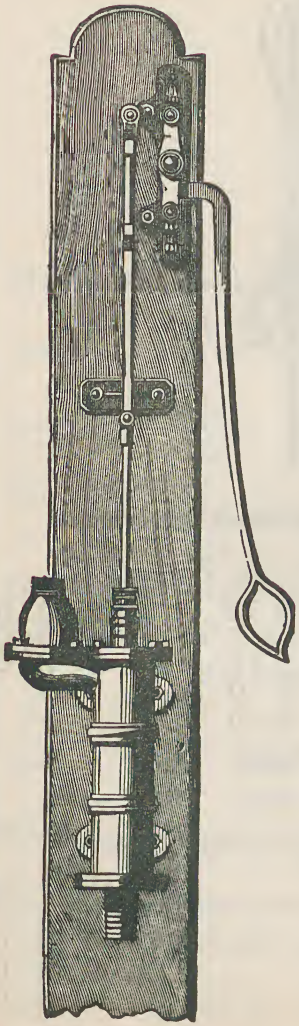
Fitted with plug and chain, 4/0 extra.

No. 522b.—Galvanized Wrought Iron Semi-circular Pig Troughs,

With strong safe edge, angle iron top, and stayed.

Length.	2 feet.	2½ feet	3 feet.	3½ feet.	4 feet.	4½ feet.	5 feet.	6 feet.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Section 10-in. wide by 5-in. deep ...	10 0	12 0	14 0	16 0	18 0	20 0	22 0	26 0
Section 12-in. wide by 5½-in. deep ...	12 0	14 0	16 0	18 0	20 0	22 0	24 0	28 0

PUMPS.



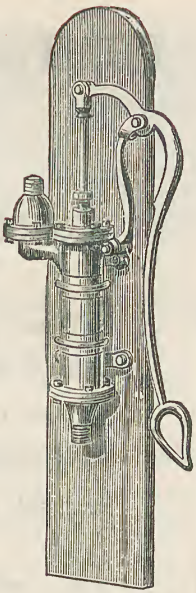
No. 523.—Brass Lift and Force Pumps.

These pumps are mounted on painted deal planks, and fitted up on the most approved principle, with slings and guides, and wrought iron handles.

		Best.			2nds.		
2-in. ...	each	£3	0	0	£2	11	0
2½-in....	„	3	10	0	3	1	6
3-in. ...	„	4	5	0	3	11	0
3½-in....	„	5	10	0	4	4	0
4-in. ...	„	6	10	0	4	17	0

Ditto, on strong oak planks.

		Best. Extra Strong.			2nds.		
2-in. ...	each	£4	4	0	£2	13	0
2½-in....	„	5	5	0	3	3	6
3-in. ...	„	6	6	0	3	14	0
3½-in....	„	7	7	0	4	7	0
4-in. ...	„	8	8	0	5	0	0
4½-in....	„	13	0	0	—		—
5-in. ...	„	18	0	0	—		—



No. 524.—Improved Vibrating Standard Brass Pump.

On plank.

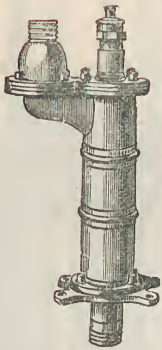
		Best.	2nd.
2-in.	each	£2 18 0	£2 10 0
2½-in....	,,	3 5 0	3 0 0
3-in.	,,	3 15 0	3 8 0
3½-in....	,,	5 0 0	—
4-in.	,,	7 0 0	—

No. 525.—Iron Lift and Force Pumps.

(Similar to No. 523.)

On strong oak planks, barrels lined with copper, brass unions at each end.

2-in.	each	£2 11 0
2½-in.	,,	2 16 0
3-in.	,,	3 6 0
3½-in.	,,	3 14 0
4-in.	,,	4 1 0



No. 526.—Brass Deep Well Pumps.

With brass top and bottom chambers for lead pipe. On square tails, with iron bows or socket keys.

	2-in.	2½-in.	3-in.	3½-in.	4-in.
Best	50/0	63/0	75/0	90/0	113/0
2nds	35/0	40/0	52/0	65/0	80/0

No. 527.—Extra Strong Brass Deep Well Pumps.

	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.
	£ s.	£ s. d.	£ s. d.	£	£ s d.	£	£ s.
Each	2 15	3 7 6	4 7 6	5	6 12 6	10	14 14

No. 528.—Extra Strong Gun Metal do.

With doors at top and bottom.

	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	6-in.
	£ s.	£ s.	£ s.	£ s.	£	£	£
Each ...	4 10	5 15	6 10	8 10	12	15	21

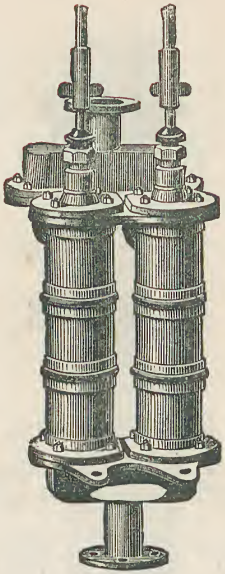
EXTRA.

If screwed for iron, each end.....each, 2-in. to 3-in., 3/6 ; 3½-in. and 4-in., 5/6

No. 529.—Strong Iron Deep Well Pumps.

Lined with copper, unions each end.

	2-in.	2½-in.	3-in,	3½-in.	4-in.
Each	26/0	30/0	40/0	52/0	58/0



No. 530.—Gun Metal Double Barrel Deep Well Pumps. For cast iron flange pipe.

	2½-in.	3-in.	3½-in.	4-in.
Each ...	£7	£9	£10 10	£13

With strong brass buckets and hard drawn copper rods.

The bucket rods fitted with bow, or socket key.

Loose flanges screwed for iron, per pair—

2-in., 2½-in., and 3-in. 5/0 3½-in. and 4-in. 8/6

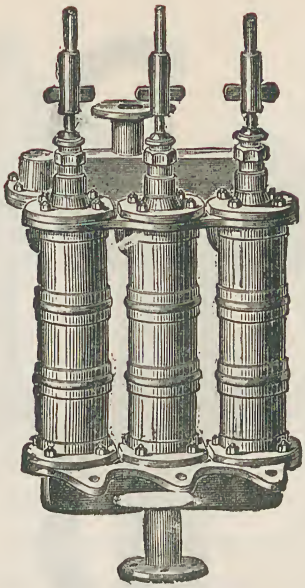
If with brass flanges and tail pipes, with leather washers, bolt and nuts, each—

2½-in. and 3-in. 15/0 3½-in. 20/0 4-in. 25/0

If top and bottom chamber are made entirely of brass, the price will be extra.

No. 531.—With doors at top and bottom, each—

2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	6-in.
£10	£12	£14 10	£18	£24	£30	£40



No. 532.—Gun Metal Treble Barrel Deep Well Pumps. For cast iron flange pipe.

	2-in.	2½-in.	3-in.	3½-in.	4-in.
Each	£9	£10 10	£13	£16 10	£20 5

With strong brass buckets and hard drawn copper rods. The bucket-rods fitted with bow or socket key.

Loose Flanges, screwed for iron, per pair—

2-in., 2½-in., and 3-in. 5/0. 3½ and 4-in. 8/6

If with brass flanges and tail pipes, with leather washers, bolts and nuts, each—

2½-in. and 3-in. 15/0 3½-in. 20/0 4-in. 25/0

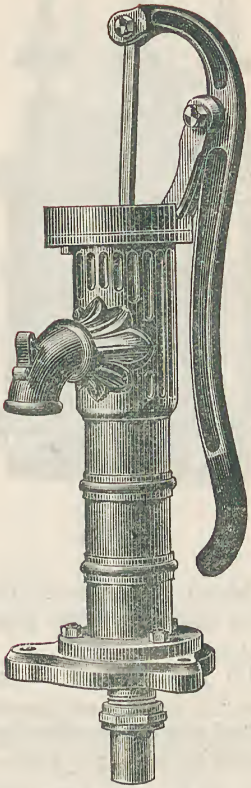
If top and bottom chamber are made entirely of brass the price will be extra.

No. 533.—With doors at top and bottom.

10-in. stroke, each.

2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	6-in.
£15	£17 10	£21 10	£26 5	£35	£45	£63

	6-in.	7-in.	8-in.	9-in.
18-in. stroke ... each	£70	£85	£110	



No. 0534.—Fluted Head Cast Iron Pumps, with brass unions for lead or iron pipe, and top fitted with three bolts.

The handle can be fixed to work either right or left hand, or at back.

	2½-in.	3-in.
Each	14/0	17/6

EXTRAS.

If with lugs cast on barrel ... ... each	2½-in.,	1/0	3-in., 1/3
,, copper linings ... ... ,,	,,	3/6	,, 5/0
,, brackets ... ... ,,	,,	1/0	,, 1/3

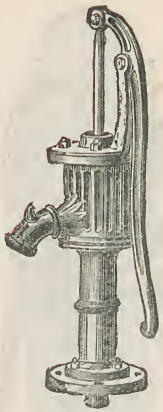


Fig. A.

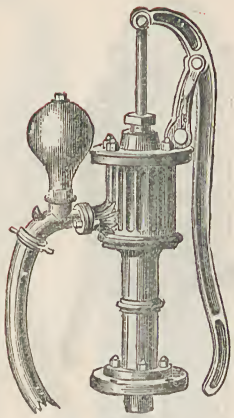


Fig. C.

No. 534.—Improved New Pattern Iron Cottage Pumps.

With Vibrating Standards.

The makers have given great attention to combine in these pumps all the improvements that experience could suggest. The buckets are of a new and improved pattern, which are always tight, and can be re-leathered by any ordinary workman. The clacks can be easily got at and replaced, when worn out, without trouble. The tail pieces are of brass, and are made to suit lead or iron pipe as required. There is no danger of the bucket-rod becoming bent or worn. The barrel may be removed for repairs, without interfering with the tail piece or suction pipe. The cover is so arranged that it can be fixed in any position required.

	2½-in.	3-in.	3½-in.
Fig. A., Lift Pump ... . each	17/0	23/0	35/0
Fig. C., Force Pump, with union for hose, each	30/0	39/0	54/0
Brackets for fixing Fig. A. or C. to planks, each	2/9	2/9	4/0
EXTRAS.			
Barrels, lined with copper ... ... each	5/0	5/6	8/3
Brass buckets ... ... „	2/9	3/6	4/0

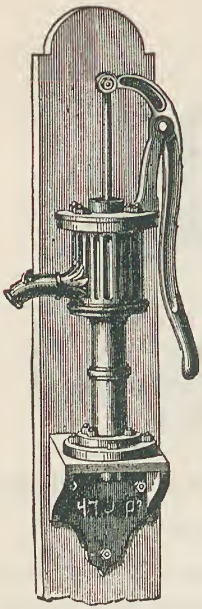


Fig. B.

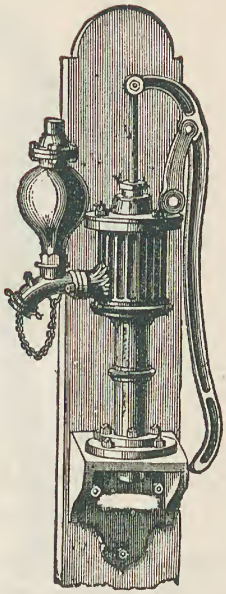


Fig. D.

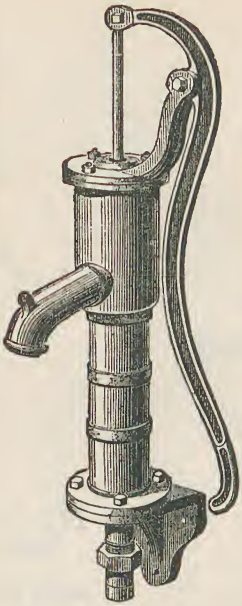
No. 534.—Improved New Pattern Iron Cottage Pumps.

With vibrating standards.

		2½-in.	3-in.	3½-in.
Fig. B.	Lift pump, on plank... ... each	23/6	31/0	43/0
Fig. D.	Lift and force pump, on plank, with air-vessel, &c. ... each	39/0	47/6	60/0

EXTRAS.

	2½-in.	3-in.	3½-in.
Barrels, lined with copper ... ... each	5/0	5/6	8/3
Brass buckets ... ... ,,	2/9	3/6	4/0



No. 535.—Improved New Pattern Iron Pump.

2½-in. pump on bracket, as shown, or with lugs at back of barrel ... ... each 13/9

3-in. do. 16/9; 3½-in. 25/3; 4-in. 32/0 each.

If with round flange at bottom, same price.

No. 536.—Improved New Pattern Iron Pump.

On painted deal plank.

2½-in. ... ... each 19/0

3 „ ... ... „ 24/0

No. 537.—Long Barrel Iron Cottage Pumps.

With vibrating standards.

3-ft. under nose.

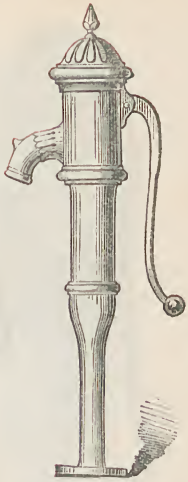
	2½-in.	3-in.	3½-in.
Each	23/6	29/6	43/6

If with brass buckets extra.

Each	2/9	3/6	4/0

Barrels, lined with copper, extra.

	2½-in.	3-in.	3½-in.
Each	5/0	5/6	8/3



No. 538.—Iron Stable, Yard, or Garden Pumps.

Fitted with wrought iron handles.

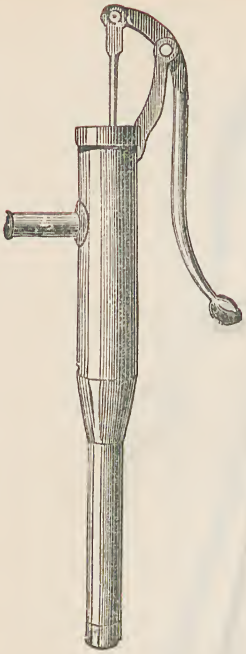
With wood buckets and sucker boxes.

2½-in.	... ... each	36/6
3 „	... ... „	45/0
3½ „	... ... „	51/0
4 „	... ... „	70/0

Extra for brass buckets and sucker boxes.

2½-in.	... ... each	3/6
3 „	... ... „	4/8
3½ „	... ... „	6/2
4 „	... ... „	9/0

When ordering, please say in what position the handle is required, whether right or left hand, or at back of spout; also say what kind of pipe will be used.



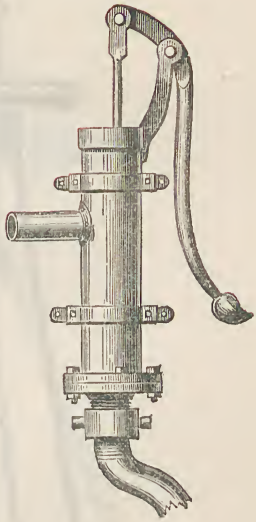
No. 539. — Galvanized Iron Liquid Manure, Barge or Contractors' Pumps, 7-ft. under spout.

3-in.	each	45/0
4 ,, ...	,,	60/0
5 ,, ...	,,	75/0
6 ,, ...	,,	82/6
7 ,, ...	,,	102/6

No. 540.—Ditto, with Sliding Suction Pipe, 8-ft. long.

4-in	each	£4 15 0
5 ,, ...	,,	5 17 0
6 ,, ...	,,	6 7 6
7 ,, ...	,,	7 15 0

Extra lengths of suction pipe, 3-in., 2/9; 4-in., 3/0; 5-in., 3/6; 6-in., 4/0; 7-in., 4/6 per foot.



No. 541. — Galvanized Iron Liquid Manure Pump.

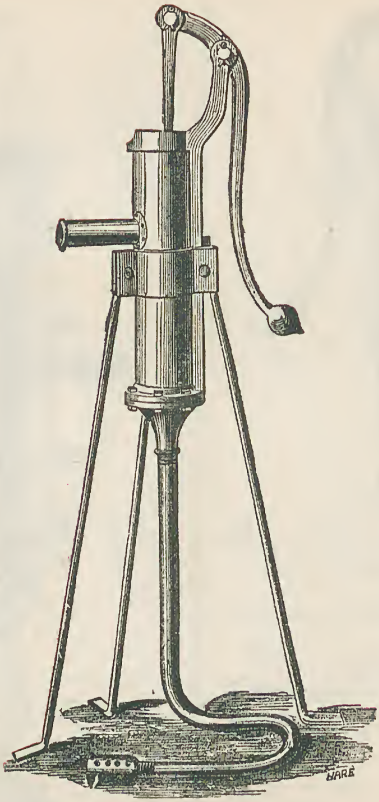
With union for hose.

On brackets, for fastening to post or water cart.

	4½-in.	5-in.
Each	45/0	55/0

Ditto without bracket.

	4½-in.	5-in.
Each	40/0	50/0



No. 542.—Galvanized Iron Liquid Manure Pump.

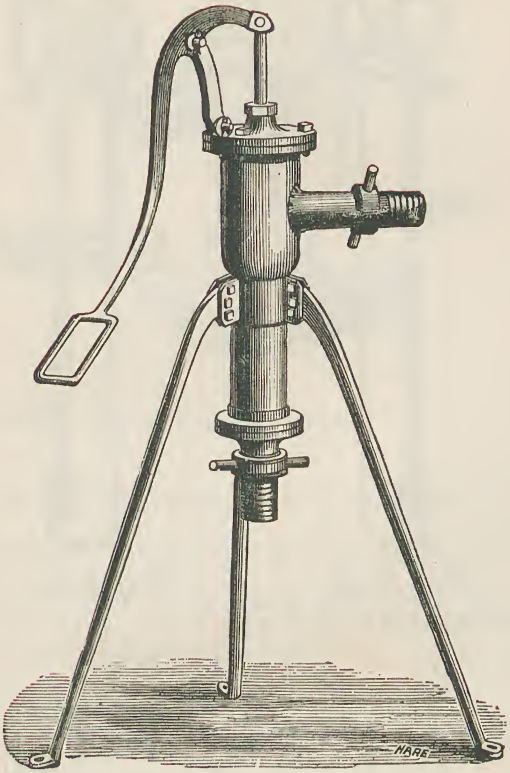
With union for hose.

On tripod legs, which work so that the pump can be raised or lowered according to the height required, and can be folded together for convenience in carrying.

4½-in. barrel ... ... each	£2	10	0
If with 15-ft. of 2¼-in. india rubber suction hose, and copper rose ... ... each	4	18	0

EXTRA.

If with strong copper barrel ... ... each 17/6

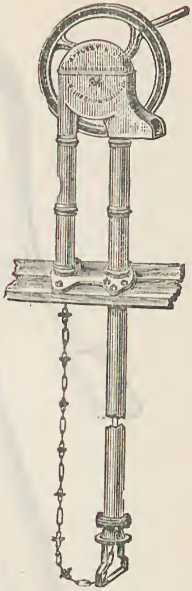


No. 543.—Improved Portable Galvanized Iron Force Pump.

On tripod legs, for liquid manure, &c., of strong construction, with brass union, &c.

Pump without hose ... ... each £4 0 0

No. 544.



No. 545.

APPLEBY'S Improved Chain Pumps.

No. 544.

		Galls. per hour (one man).			Galls. per hour (one man).
2-in., each	£3 10 0	800	3-in., each	£4 0 0	2,500
2½-in. „	3 15 0	1,500	3½-in. „	5 0 0	5,000

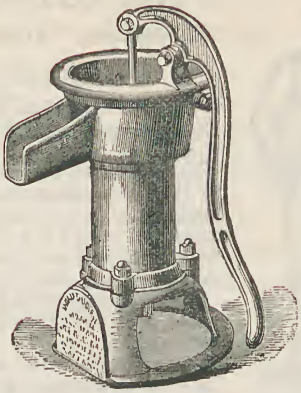
No. 545.—Latest Improved Pattern, Covered Pump.

		Galls. per hour (one man).			Galls. per hour (one man).
2-in., each	£4 0 0	800	3-in., each	£5 0 0	2,500
2½-in. „	4 10 0	1,500	3½-in. „	6 0 0	5,000
4½-in. each	£14 10 0	12,000 galls. per hour (with power).			

All 12-ft. under spout.

	2-in.	2½-in.	3-in.	3½-in.	4½-in.
Extra length ... per foot	3/6	3/9	4/0	5/0	12/0

These Pumps are confidently recommended for Liquid Manure, Gas Tar, Thick Muddy Water, &c.

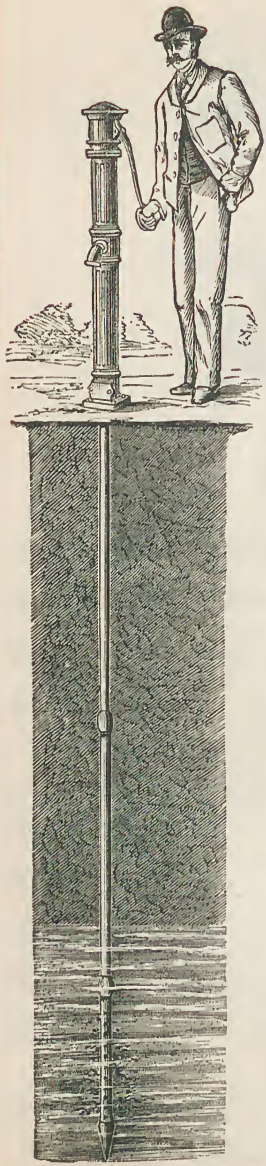


No. 546.—The Pitcher Spout Pump.

This pump is generally known as the Abyssinian Pump from its being the pattern used so successfully by the Army in Abyssinia, in 1868. The bucket and valves can be readily examined or repaired. The handle can be secured at any angle from the spout.

2½-in.	each	15/0
3-in.	,,	17/6
3½-in.	,,	18/6
4-in.	,,	20/0
6-in.	,,	56/6

The 6-in. pump is made with long handle, suited for two men, and is a very useful pump for contractors' use, &c.



No. 547.—Norton's Patent "Abyssinian" Tube Wells.

ADVANTAGES.

Purity: being less liable to contamination than any existing mode of procuring water.

Economy: being moderate in price, and when once fixed the cost of keeping in repair is little or nothing, entirely dispensing with water rates, the saving of which will reimburse the outlay in a very short period; and to all carrying on operations where water is consumed, the saving is very great.

Refreshing coolness in the hottest weather, when it is from 10 to 20 degrees cooler than water laid on.

They can be driven in quicksands (if there be a perceptible grit) when all other methods have failed.

They can be removed and re-driven, should it at any time be found more convenient to have them in another spot.

They can be driven any depth into the water-bearing stratum without trouble, whereas no great depth can be got with a dug well after water is struck, unless a very expensive system of pumping be resorted to.

They are rapidly made without removal of earth, the time usually occupied being from one to two days, or more, according to depth and nature of strata.

In the event of water not being found, they can generally be withdrawn; whereas on the old plan, if unsuccessful, the whole expense and labour of digging are thrown away.

N.B.—When the water rises to within 25 feet of the surface, although the Tube Well may be 100 feet deep, an ordinary pump only is required; but where the water does not rise to within 25 feet of the surface a deep well pump has to be provided suitable for the particular depth at which the water stands.

The following are the average quantities of water yielded by the above-sized Wells, depending upon the nature of the water-bearing strata, and the size or power of Pump applied, viz.:—

1¼-in.,	150	to	600	gallons per hour.
2 ,,	300	,,	1,200	,, ,,
3 ,,	600	,,	2,400	,, ,,

No. 547.—Norton's Patent "Abyssinian" Tube Wells.

NET TRADE PRICES.

		£	s.	d.
1¼-in.	"Abyssinian" Tube Well, 30-ft.	2	7	0
	Extra Tube for do. ... per foot	0	1	5
	"Abyssinian" Pitcher Spout Pump for do., 3-in. barrel	0	18	0
	"Abyssinian" Field Pump (extra strong) do. ...	1	6	0
	"Abyssinian" Home Pump do. do. ...	1	16	0
	Set of Patent Driving Apparatus and appliances ...	5	10	0
	Complete set of do. with Tool case, and Tube cutting and screwing tools	12	0	0
	Set of combined Driving and Withdrawing Apparatus complete	14	0	0
2-in.	"Abyssinian" Tube Well, 30-ft.	4	7	0
	Extra Tubing for do. ... per foot	0	2	7
	"Abyssinian" Pitcher Spout Pump for do., 4-in. barrel	1	4	0
	"Abyssinian" Field Pump (extra strong) do. ...	1	12	0
	Set of Patent Driving Apparatus and appliances ...	8	10	0
	Complete set of do., with Tool case and Tube cutting and screwing tools	17	0	0
	Set of combined Driving and Withdrawing Apparatus complete, with tripod	19	0	0
3-in.	"Abyssinian" Tube Well, 30-ft.	7	4	0
	Extra Tubing for do. ... per foot	0	4	0
	"Abyssinian" Pitcher Spout Pump for do., 6-in. barrel	3	10	0
	Set of Patent Driving Apparatus, complete, with sheerlegs	33	0	0

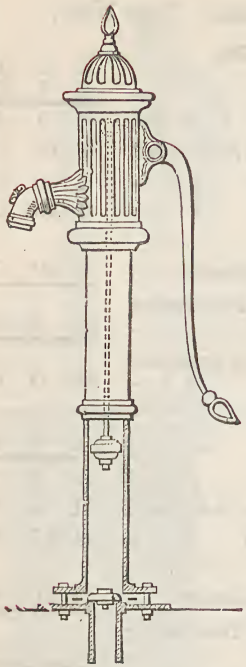
Any set of Driving Apparatus will Drive a number of Wells.

Improved Sand Tubes, for sandy soils where there is a perceptible grit, can be supplied.

Prices of 3-ft. Sand Tubes, 1¼-in. 22/6; 2-in. 31/6; 3 in. 59/6

Prices "Abyssinian" 5-ft. Pointed and Drilled Tubes,
1¼-in. 11/0; 2-in. 22/0; 3-in. 44/0

FOR LARGER SIZES QUOTATIONS ON APPLICATION.



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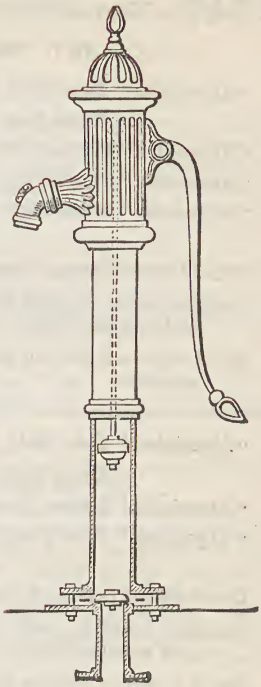


No. 5.

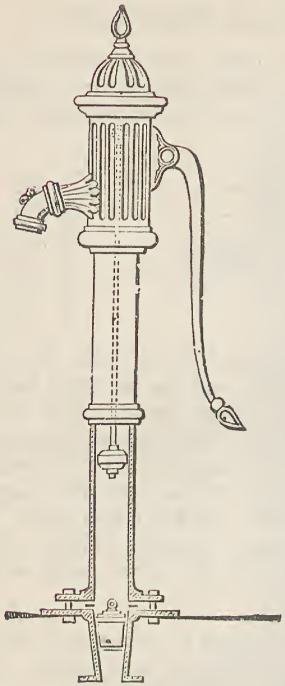
No. 548.—Improved Fluted Head Straight Body Pumps.

With wrought iron handles.

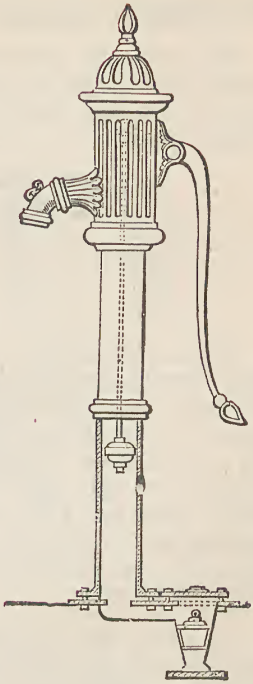
No. 4.—Bored at bottom and fitted with brass bucket, and with brass tail piece tinned for lead pipe.

No. 5.—Ditto, with flange tail piece for iron pipe.

2½-in.	...	3-ft.	under spout	...	...	each	£2	0	0
3-in.	...	3-ft.	,,	...	...	,,	2	5	0
3½-in.	...	3-ft.	,,	...	...	,,	2	15	0
3½-in.	...	4-ft.	,,	...	...	,,	2	17	6
4-in.	...	4-ft.	,,	...	...	,,	3	15	0
4-in.	...	6-ft.	,,	...	...	,,	4	7	6
5-in.	...	6-ft.	,,	...	...	,,	6	10	0



No. 6.



No. 7.

No. 548.—Improved Fluted Head Straight Body Pumps

No. 6.—With taper piece and brass lower valve as well as brass bucket: a very useful and serviceable Pump, and recommended for general purposes.

No. 7.—Patent ditto. This Pump is worthy attention. By means of a small plate in the foot chamber, access is at once permitted to the lower valve, either for its clearance or repair. Any valve, however well constructed, will occasionally become impeded by chips or rubbish. With No. 7 Pump this can instantly be remedied, and it is nearly always owing to some obstruction or imperfection in this lower valve that inconvenience arises.

			No. 6.	No. 7.
2½-in.	3-ft.	under spout...each	£2 5 0	£2 10 0
3-in.	3-ft.	,, ... ,,	2 10 0	2 17 6
3½-in.	3-ft.	,, ... ,,	3 0 0	3 10 0
3½-in.	4-ft.	,, ... ,,	3 2 6	3 12 6
4-in.	4-ft.	,, ... ,,	4 4 0	4 12 6
4-in.	6-ft.	,, ... ,,	5 0 0	5 7 6
5-in.	6-ft.	,, ... ,,	7 5 0	8 0 0

No. 549.—Improved Cast Iron Long Barrel Pumps.

For wells over 25-ft. to 30-ft. in depth, with detached bored barrel, brass bucket, and lower box included, wrought iron handles and gear complete, ready to connect iron or lead suction pipe, but without pipes.

2½-in. bore,	3-ft.	below spout	...	... each	£3 10 0
3-in. „	3-ft.	„	...	... „	3 15 0
3-in. „	4-ft.	„	...	... „	3 18 0
3½-in. „	4-ft.	„	...	... „	4 5 0
4-in. „	4-ft.	„	...	... „	5 0 0
5-in. „	6-ft.	„	...	... „	8 0 0

With a 6-ft. length of cast iron flanged rising main pipe, for fixing between the pump head (or case) and the working barrel, this rising main pipe being half an inch larger than the bore of the barrel, to allow of drawing up the bucket readily for re-leathering, the rod connected with the handle passing down to the barrel through this pipe; also 21-ft. of strong proved cast iron flanged suction pipe, and a rose end or strainer at foot; this, with the working barrel about 2-ft., makes a pump complete to 30-ft., with bolts, nuts, and packings for the joints of the pipes ready to fix. See prices below.

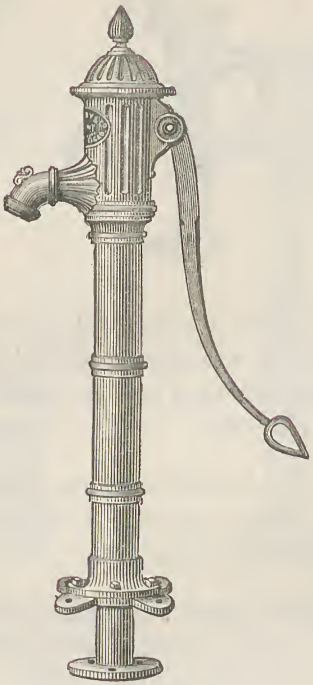
By adding the extra price per foot, when a well exceeds 30-ft., the total cost for any given depth is at once ascertained. For example, a 3-in. pump, complete for a well 45-ft. deep, would cost £8 16s.

Bore of barrel.	Gallons per hour, about	Price to 30-ft.	Rising main and rods inclusive, per foot.	Stout brass lining to barrel.
2½-in.	270	£5 18 6	2/9	12/0
3-in.	400	6 8 6	3/2	17/6
3½-in.	525	7 5 6	3/8	25/0
4-in.	700	8 3 6	4/6	32/6
5-in.	1,100	12 9 0	6/0	50/0

Lighter brass linings can be supplied at less cost, but are not recommended.

These pumps are simple, durable, and easily fixed. Brass lining to barrels are a great improvement When the well exceeds 80-ft., a pump with frame and fly-wheel is best, and necessary if it is required to force water to an elevation above ground line.

APPLEBY'S PATENT IRON PUMPS.

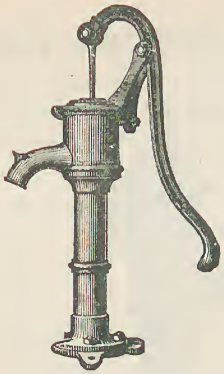


No. 550.—APPLEBY'S Improved Pumps with Fluted Pattern Heads and Caps (41).

3-ft. high under spout, fitted with tail piece, &c., to suit flanged pipe—

Bore of Pump Barrels—	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	6-in.
Bore of Suction Pipes—	1½-in.	2-in.	2½-in.	2½-in.	3-in.	3½-in.	4-in.
Each	43/0	50/6	54/0	60/0	72/0	90/0	

Appleby's patent Pumps are all fitted with their Patent Oscillating Conical Valves and Buckets, with indestructible packings, and will pump hot or cold water, or pulpy matter. All pumps are fitted with handles on right hand side, unless ordered otherwise. The barrels are all carefully bored and fitted.



No. 551.—2-in. APPLEBY'S Pump, 14½-in. high, fitted with reversible cap and handle bored and tapped for 1-in. wrought iron tube (30R) ... ... each £0 15 0

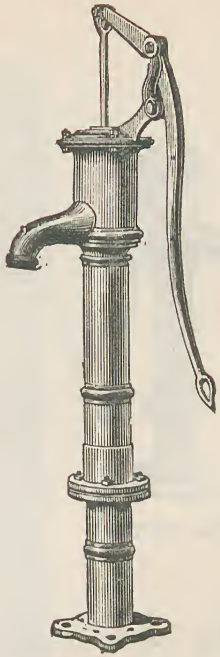
No. 552.—2½-in. APPLEBY'S Pump, 16-in. high, bored and tapped for 1-in. wrought iron tube (30R) ... each 0 18 0

No. 552a.—2½-in. APPLEBY'S Pump 21-in. high, 13-in. under spout, fitted with reversible cap and handle, for 1¼-in. iron tube, &c., (31) ... each 1 0 0

No. 552b.—2½-in. do., 19-in. under spout ,, 1 2 6
,, ,, ,, 22-in. ,, ,, 1 3 6
,, ,, ,, 25-in. ,, ,, 1 5 6

No. 552c.—3-in. do., 21-in. high, 13-in. under spout for 1½-in. iron tube, &c., each 1 4 0
Do. do. 19-in. under spout ,, 1 6 6
Do. do. 22-in. ,, ,, 1 7 6
Do. do. 25-in. ,, ,, 1 9 0

No. 42



No. 54xx

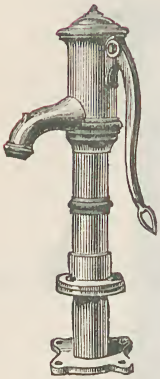
No. 553.—3½-in. APPLEBY'S Patent Yard Pump, 44-in. high 36-in. under spout, fitted with reversible cap and handle and standard pipe, to suit 2½-in. flange pipe or for 2-in. wrought iron tube, &c. (54xx) £2 10 6

No. 554.—Bucket with Appleby's patent oscillating conical valves (42), each—

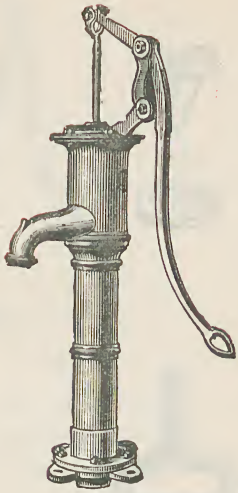
2-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-in.
3/0	3/9	5/0	6/4	7/6	11/6	13/6

No. 554a.—Patent Clack Valve, including washer (44).

1-in. for 2-in. pump ... ...each	1/0
1½-in. ,, 2½-in. ,, ... ,,	1/3
2-in. ,, 3-in. ,, ... ,,	1/10
2½-in. ,, 3½-in. and 4-in. pumps ... ... ,,	2/2
3-in. ,, 4½-in. ,, 5-in. ,, ... ,,	3/2
4-in. ,, 6-in. pumps... ... ... ,,	4/6



No. 554G



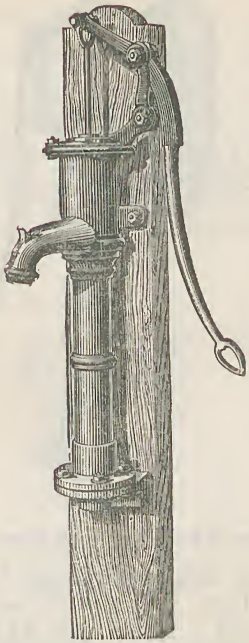
No. 555

No. 554g.—2½-in. APPLEBY'S Patent Pump, 30-in. high, 20-in. under spout, to suit either 1½-in. flanged pipe, or iron tube, &c. £1 7 0

3-in. ditto, 36-in. high, 24-in. under spout 1 10 0

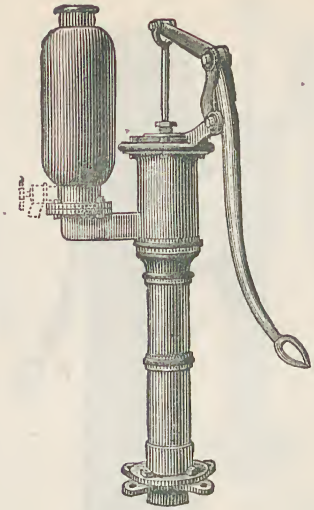
3-in. ditto, 42-in. high, 30-in under spout 1 12 6

No. 555.—3-in. APPLEBY'S Pump, 30-in. high, 18-in. under spout, fitted with reversible cap and handle, to suit 1½-in. iron tube, &c. (318) ... ...each £1 13 0



No. 556.—3-in. APPLEBY'S Pump, 30-in. high, 18-in. under spout, fitted with reversible cap and handle, bracket and lugs, bolted to strong plank, to suit 1½-in. iron tube, &c. (318BP) ... ... each £2 5 0

The above may be bored and tapped to suit 2-in. suction tube, if ordered expressly; this makes the pumps work easier.



No. 58VV.

APPLEBY'S Iron Lift and Force Pumps.

No. 557.—2½-in., fitted with flanged base plate to suit 1½-in. iron tube for suction and rising main; 24-in. high, 14-in. under nose; without air vessel (33F) ... each £2 10 6

No. 558.—3½-in., fitted with patent elbow, air vessel and retaining valve, flanged base plate, to suit 2-in. iron tube for suction and rising main, 30-in. high, 22-in. under elbow (58VV).... ... ... each 4 4 0

No. 559.—3-in., fitted with patent elbow, air vessel and retaining valve, flanged base plate to suit 1½-in. iron tube, 30-in. high, 18-in. under elbow (318VV) ... ... each 3 12 0

No. 560.—4½-in., fitted with wrought iron handle, 2½-in. tail-piece or elbow, to suit suction, and branch nozzle for 2-in. delivery hose, 24-in. high, for fixing on barrow frames, &c., to irrigate gardens, pleasure grounds, farms, &c. Without air vessel (24F) ... ... each 3 18 0

No. 561.—Appleby's Iron Pumps.

For wells from 27 to 100-ft. deep.

Fluted pattern pump head, fitted with strong wrought-iron handle, 9-ft. of flanged main pipe and wood rod (rendered impervious), with iron forked strap at each end, bored working barrel, 2-ft. 6-in. long, fitted with all the latest improvements, 18-ft. 6-in. of flanged suction pipe, with patent strainer, including bolts, nuts, and patent washers for all the pipe joints, ready for fixing, in all 30-ft.

Complete for wells 30-ft. deep, each—

	Bored Working Barrel. in.	Suction Pipe. in.	Price complete for 30-ft. deep.	Extra per foot, if exceeding 30-ft. deep.	Extra with Bucket Door, &c., to Working Barrel.	Extra for Copper Lining fitted in Bored Metal Barrel.
100 A	2½	1½	108/0	2/6	11/0	8/0
100 B	3	2	120/0	3/0	12/0	9/0
100 C	3½	2½	138/0	3/6	14/6	10/6
100 D	4	2½	156/0	3/9	18/0	13/0
100 E	4½	3	180/0	4/0	24/0	15/0

(Extra per foot: For Main Pipe and Wood Rods.)

SPECIAL NOTES.

Nos. 100 B and 100 C Pumps are recommended as the best sizes for wells varying from 50 to 80-ft. deep; unless a larger supply of water is required, and more power is applied to work larger barrels.

For wells from 50 to 60-ft. deep, pump tops, 4-ft. high, are recommended, price 3/0 extra. If from 80 to 100-ft deep, pump tops, 5 or 6-ft. high, should be used. Price from 7/6 to 15/0 extra.

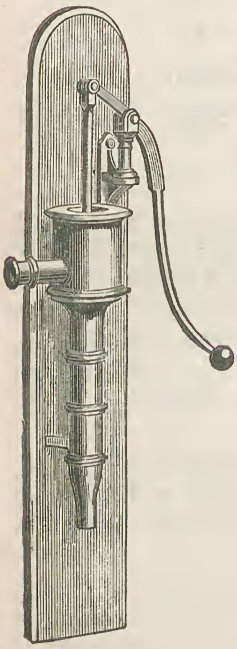
Working barrels with bucket doors, are strongly recommended, which provide easy access to the bucket (as well as the bottom clack valve), in case of need, without disturbing the rods. For extra price refer to list, as above.

N.B.—The extra price per foot is for main pipe (with wood rod), which is fixed above the barrel, and uniformly ½-in. larger in diameter than the bore of barrel; bolts, nuts, and patent elastic washers for all the pipe joints are included.

No. 562.—Iron Pump.

On plank, barrel lined with copper, with brass union for suction.

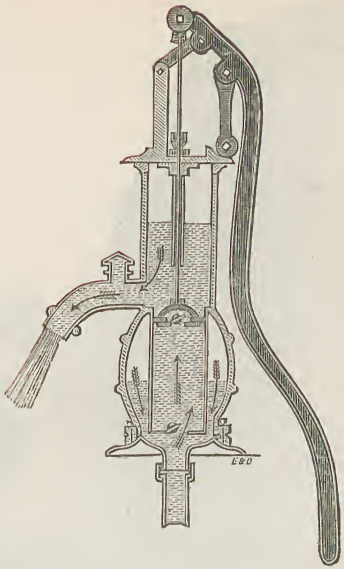
2½-in.	each	24/6
3-in....	„	28/6
3½-in.	„	35/6
4-in....	„	39/6



No. 563.—Lead Pump.

On deal plank, with wood bucket and sucker.

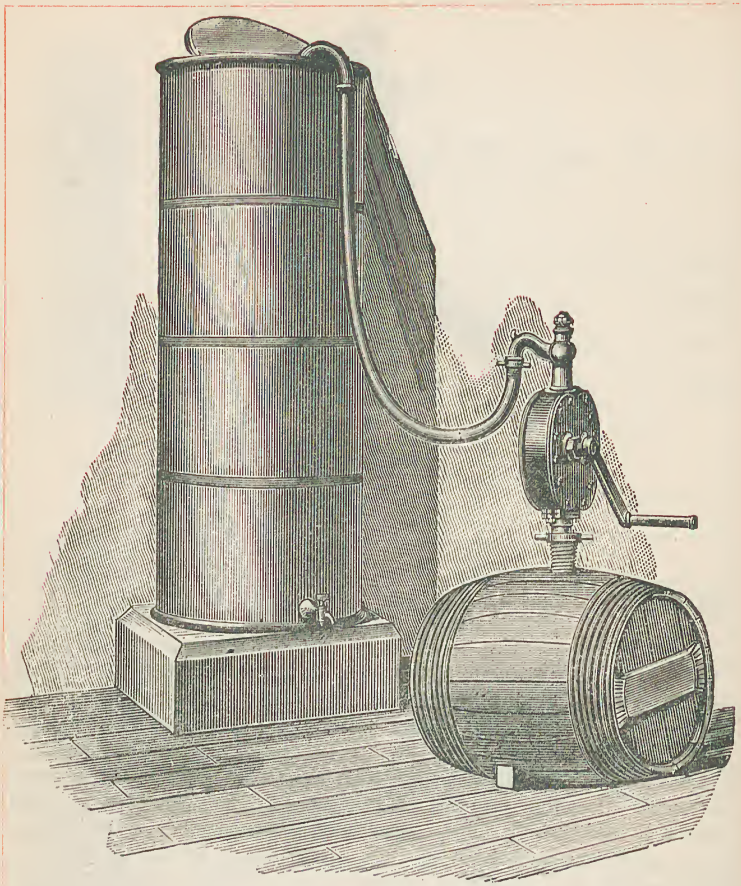
2½-in.	each	34/0
3-in.	„	38 0



No. 564.—The "Gibson" Patent Cistern Pump.

The "Gibson" is a brass pump enclosed in an iron casing, the lower part of this casing forming a vacuum chamber, and, when made as a Lift and Force Pump, the upper part forming an air chamber. The vacuum chamber acts as a reservoir, holding the water up to the check valve; the Pump takes its supply from this reservoir, and thus works with the greatest ease; and there is always a supply of water for the next stroke. The pump is so constructed that it will work easier with a 1-inch Suction Pipe than ordinary pumps with 1¼-inch; this saves largely in the cost of pipe. The lever of the pump will not fly up even when working in deep wells, and the lift and force pumps have a parallel motion, which keeps the piston rod in a perfectly vertical position at all points of the stroke, making the Pump almost frictionless. We claim that the "Gibson" is the simplest in construction, most complete, easiest working, and cheapest first-class Brass Pump offered to the trade.

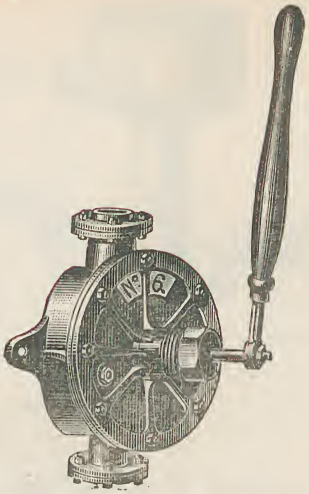
No. 1.	Lift Pump,	2¾-in.	Brass Cylinder,	1-in.	Suction,	each	28/6
„ 2.	„ „	3½-in.	„ „	1¼-in.	„ „		37/6
„ 3.	Lift and Force Pump ...	2¾-in.	„ „	1-in.	„ „		42/0
„ 4.	Do. do.	3½-in.	„ „	1¼-in.	„ „		50/0



No. 564a.—Improved Rotary Barrel Force Pump for wine, oil, &c.

This is a most invaluable arrangement for pumping wines, oils, spirits, &c., from casks in cellars, &c., into cisterns or other store receptacles at a distance; it is largely used in chemical works, oil refineries, oil, wine and spirit stores, &c. The pump is provided with tapering attachment which will fit into any bung from say 1½-in. to 4-in. diameter, without injuring the shape of bung in any way.

Bore of suction pipe	1-in.	1-in.	1¼-in.
,, delivery pipe	1-in.	1-in.	1-in.
Size of delivery hose arranged for	¾-in.	1-in.	1-in.
Iron Rotary Barrel Force Pump, with iron suction pipe, hose coupling, hook and spout complete	68/0	80/0	96/0
Brass Rotary Barrel Force Pump, with iron suction pipe, hose coupling and spout complete, each	156/0	176/0	196/0



No. 564b.—Semi-Rotary Wing Pump.

A new type of double acting lift and force pump, which is unequalled for simplicity, compactness and working capacity. It is most durable in wear, very easy to work, and is readily fixed in position. Gun-metal working parts are always supplied in both iron and gun-metal pumps. The handle or lever by which the pump is worked, is simply secured by a lock-nut, and may therefore be changed to work in any position required. These pumps will draw water up to about 24 feet vertical with the aid of a foot valve, and are capable of forcing the water to a height of 100 to 150 feet, if sufficient power be applied.

No. 564c.—Mounted on a strong wood plank; in all other respects it is precisely the same as No. 564b.

No. of pump...	0	1	2	3	4	5	6	7	8	9	10	11
Outside diam. of pump case	5¼	6½	7¾	9	13	19	22	26	29	44	53	62-in
Diam. of suction&delivery	½	¾	1	1¼	1¼	1½	1½	2	2	2½	3	3
Galls.of water raised per minute,apprx	4	5	6	9	13	19	22	26	29	44	53	62

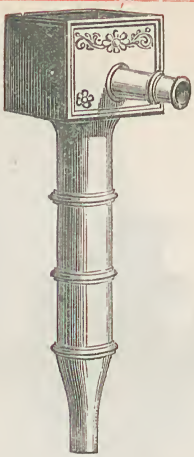
No. 564b.—Iron pump with gun-metal valves.
28/ 32/ 41/ 51/ 60/ 70/ 86/ 112/ 140/ 205/ 315/ 350/

No. 564b.—Gun-metal pump with gun-metal valves.
39/ 50/ 70/ 84/ 105/ 120/ 175/ 235/ 280/ 400/ 600/ 720/

No. 564c.—Iron pump with gun-metal valves.
34/ 38/ 48/ 58/ 69/ 79/ 95/ 123/

No. 564c.—Gun-metal pump with gun-metal valves.
45/ 56/ 77/ 91/ 114/ 129/ 184/ 246/

We recommend that a foot valve should be used in the suction pipes of these pumps, and so dispense with the necessity of priming the pump after it has been standing for some time.



No. 565.—Lead Barrel, Head, and Nozzle. Soldered together.

Each 2½-in. 13/ 3-in. 18/0 3½-in. 25/0 4-in. 30/0

FITTINGS FOR SAME.

No. 566.—Iron Jack Pump Handles.

	2½-in.	3-in.	3½-in.	4-in.
Each	3/9	4/2	6/2	8/3

No. 567.—Iron Jack Pump Handles

With brass bearings.

	2½-in.	3-in.	3½-in.	4-in.
Each	8/2	9/9	11/6	14/6

No. 568.—Keys and Collars.

Per doz. 2/0

No. 569.—Double Sucker Hook.

Each 8/6

No. 570.—Single Sucker Hook.

Each 4/3

No. 571.—Leather for Buckets.

Per lb. 2/10

Ditto, Oil Dressed, per lb. 3/0.

No. 572.—Wood Buckets.

2½-in.	3-in.	3½-in.	4-in.	4½-in.
3/9	4/9	6/3	7/3	10/6

5-in. 5½-in. 6-in.

16/0 19/6 21/6 per doz.

Wedge buckets, 1/0 per doz. extra.

Barge buckets same prices.

No. 573.—Wood Suckers.

2½-in.	3-in.	3½-in.	4-in.	4½-in.
1/6	2/0	2/9	3/3	4/6

5-in. 5½-in. 6-in.

6/6 7/6 8/6 per doz.

No. 574.—Wood Buckets, Leathered.

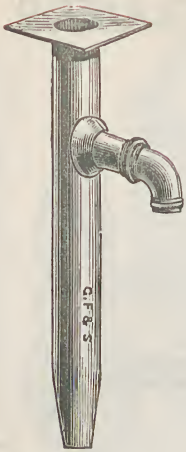
	2½-in.	3-in.	3½-in.	4-in.
Per doz.	18/0	21/0	23/0	29/0

No. 575.—Wood Suckers, Leathered.

	2½-in.	3-in.	3½-in.	4-in.
Per doz.	7/0	8/0	9/0	10/0

No. 576.—Lead Clacks.

Per lb. ... ... 4d.



No. 576A

No. 576B

No. 576a.—Lead Pump made out of drawn barrelling, with cast bent nozzle, square flange at top and tapered foot, as shown

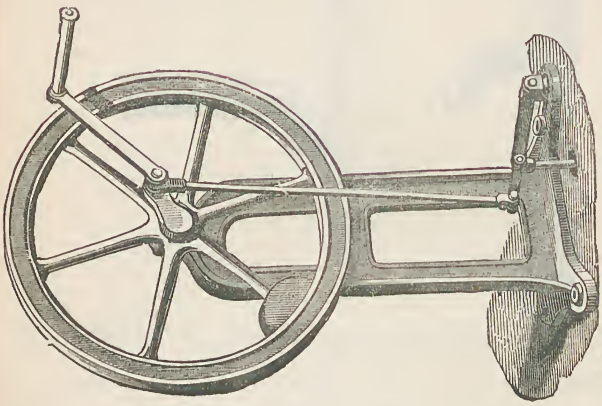
2½-in.	... 2-ft. 6-in. long	...	each	£1	1 0
3-in.	... 2-ft. 6-in. ,,	...	,,	1	3 0
3-in.	... 3-ft. long	... ...	,,	1	4 6
3½-in.	... 3-ft. ,,	... ...	,,	1	7 0
4-in.	... 3-ft. ,,	... ...	,,	1	10 0

No. 576b.—Cast Lead Bent Nozzles.

No. 1 for 2½-in. and 3-in. pumps ... ...each	2/6
,, 2 ,, 3½-in. ,, 4-in. ,, ... ,,	3/0

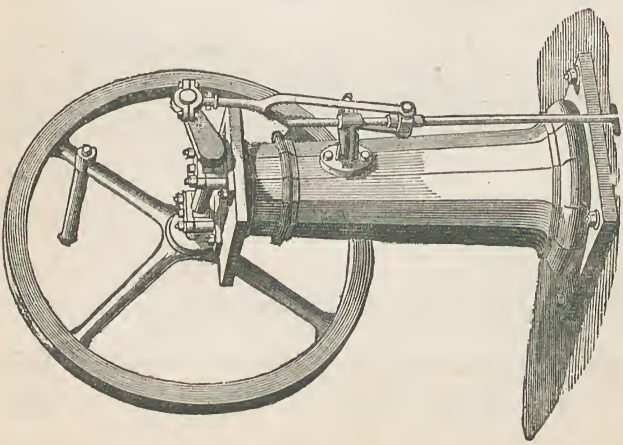
For prices of handles and buckets and suckers, see page 290.

WELL ENGINE FRAMES, &c.



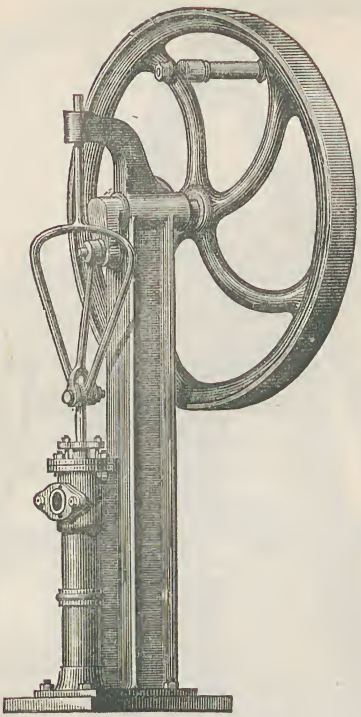
No. 578.—Improved Single Rotary Well Engine Frame.

The simplest, strongest, and most economical yet introduced for wells not exceeding 50-ft. in depth, each £5 10 0



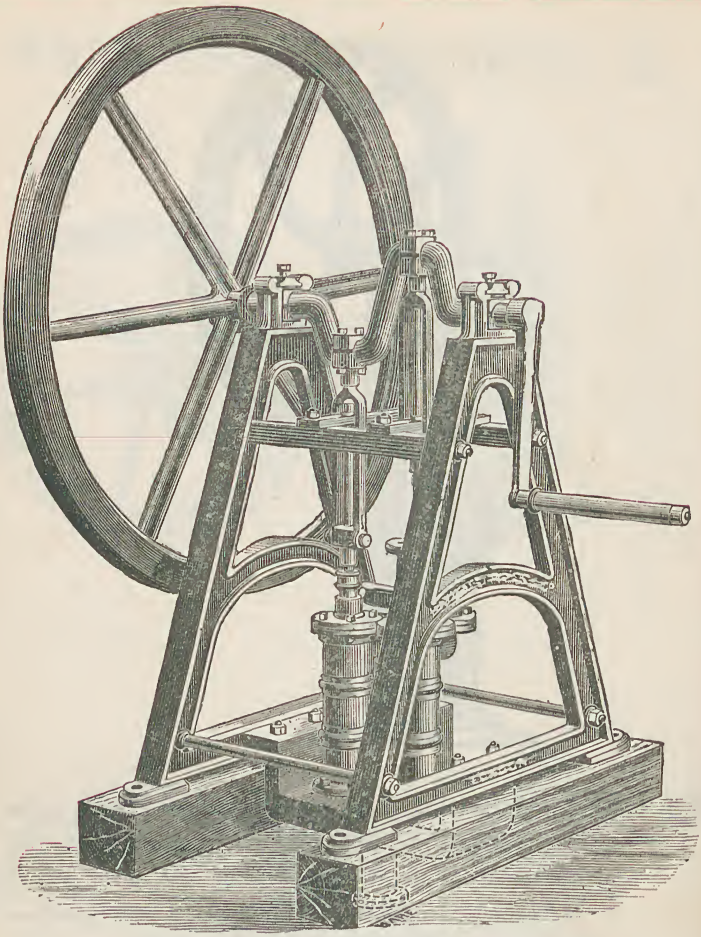
No. 577.—Column Pattern Well Engine Frame.

With crank arm, sling and guide, brass coupling, fly-wheel counter-balance, and handle, each £9 10 0



No. 578a.—Pillar Pump for hand or steam power. The standard and working barrel are in one casting, ensuring great rigidity and strength, strong crank, wrought iron connecting rod, quadrant and turned rod, stuffing-box and brass gland, strong fly-wheel, with flat edge to take a strap for steam power if required (370).

2½-in. ... ...each	£6	14 0
3-in. ... ... ,,	7	0 0
3½-in. ... ... ,,	7	10 0
4-in. ... ... ,,	8	5 0



Strong Triangular Well Engine Frame.

No. 579.

Fitted with double brass pump barrels, wrought-iron crank, slings and guides, 4-ft. fly-wheel and handle complete.

With 2½-in. double barrel, each	£20	0	0
„ 3 „ „ „	22	0	0
„ 3½ „ „ „	24	0	0

No. 580.

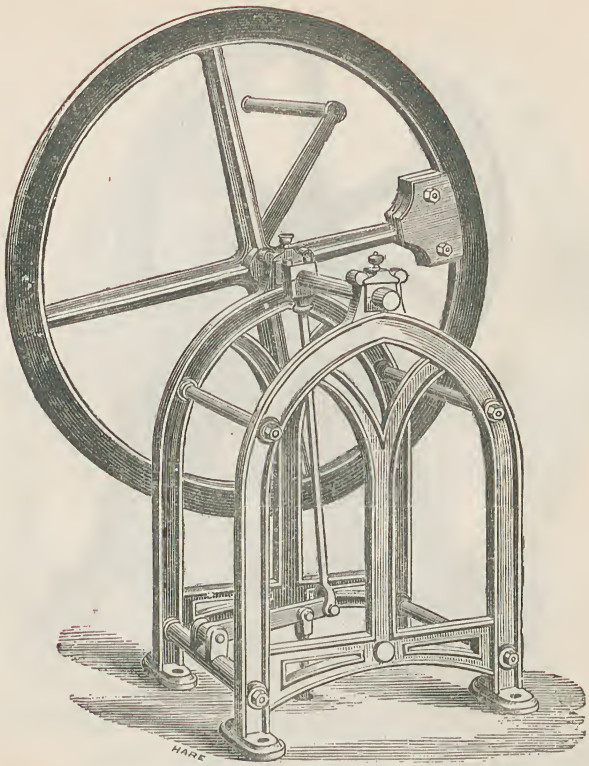
With single brass pump barrel, working with sling and guide, wrought-iron crank, 4-ft. fly-wheel, and handle complete.

With 2½-in. barrel... ... each	£14	10	0
„ 3 „ „ ... ... „	15	10	0
„ 3½ „ „ ... ... „	16	10	0

Extra handle, 15/0.

Either of the above, fitted with spur-wheel and pinion, with power of 2 to 1, or 3 to 1, extra, £3 each.

If fitted with fast and loose driving pulleys for steam power instead of handle, extra, £2 each.



Strong Gothic Well Engine Frame.

No. 581.

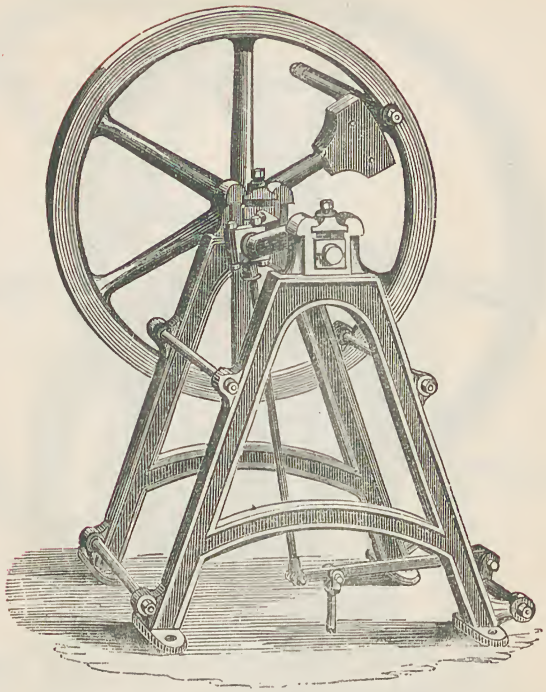
With 4-ft. fly-wheel, counter-balance weight, brass coupling, single throw wrought-iron crank, wrought-iron lever and handle complete, each	£10	0	0
If with double throw wrought-iron crank ... „	12	0	0

Extra handle, each 15/0.

No. 582.

With wheel and pinion, power 2 to 1, or 3 to 1, with 4-ft. fly-wheel, single throw crank, &c., as above ... ... each	12	0	0
If with double throw wrought-iron crank ... „	14	10	0

Extra handle, each 15/0.



No. 583.—"A" Shaped Well Engine Frame.

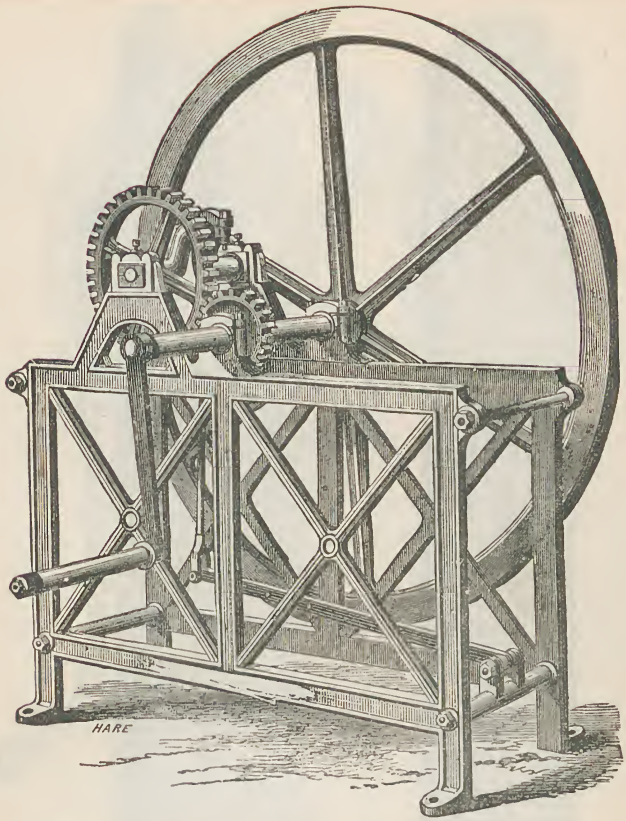
Specially recommended for situations where a moderate supply of water is required to be easily raised from a deep well.

With single throw crank and lever arrangement

					each	£8 10	0
,,	double	,,	,,	,,	,,	10 10	0

EXTRAS.

If with sling and guide to single throw crank	each	£1 0	0
,, ,, ,, double ,, ...	,,	1 15	0
Extra handle	,,	0 12	0



No. 584.—Square Well Engine Frame.

With 4-ft. 6-in. fly-wheel, brass coupling, wrought-iron lever, single-throw wrought-iron crank and handle, complete, with spur wheel and pinion, with power of 2 to 1, or 3 to 1 ... ... each	£15	10	0
Ditto, with double-throw wrought-iron crank ... ... „	17	10	0
If fitted with fast and loose pulleys for driving by steam power instead of handle, extra ... ... each	2	0	0

No. 585.—The above Frame, without Spur Wheel and Pinion.

With counter-balance weight, &c., single-throw wrought-iron crank... ... ... each	£13	0	0
Ditto, with double-throw wrought-iron crank ... ... „	15	0	0

Extra handle, each 15/0.

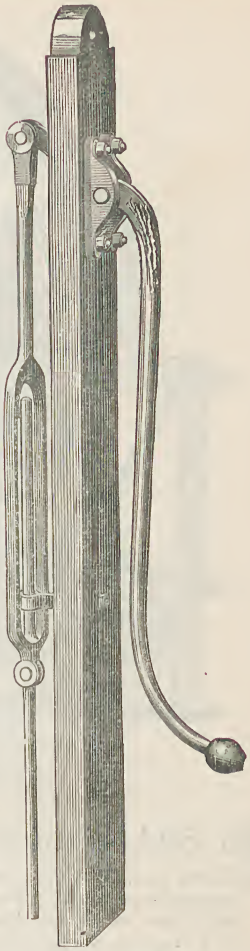
No. 586.

Strong Wrought-iron Deep Well Handle.

Mounted on strong plank, with carriage, brass bearings, slings and guides, to work to right or left hand.

20 to 30-ft. 52/6, 40 to 50-ft. 55/0

60 to 70-ft. 57/6, 80 to 100-ft. 62/6



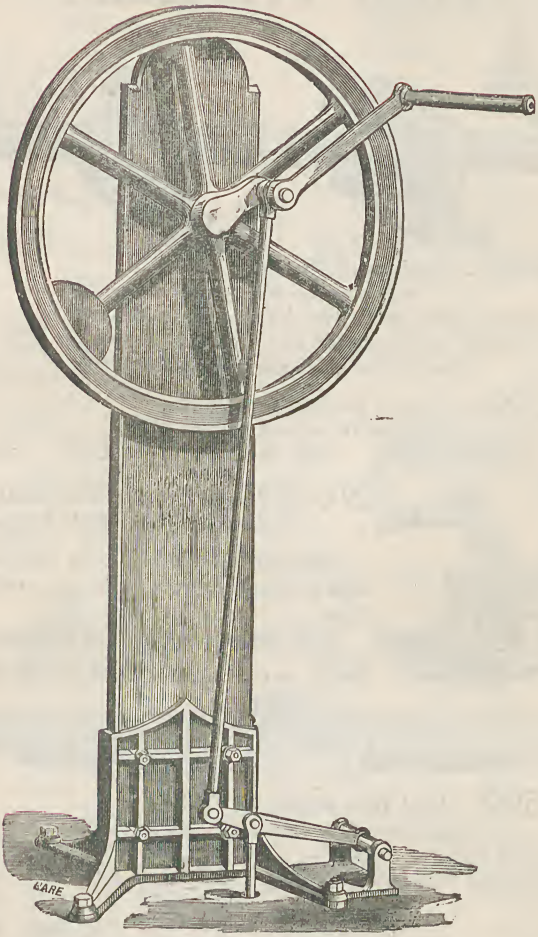
No. 587.

Strong Wrought-iron Deep Well Pump Handle.

Mounted to work through strong planks, with brass bearings, loaded for

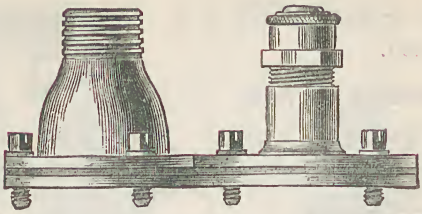
20 to 30-ft. 42/0, 40 to 50-ft. 45/0

60 to 70-ft. 48/0, 80 to 100-ft. 52/6



No. 588.—Pump Frame, with Fly Wheel and Crank.

With plank fixed in cast iron pedestal, each £7 12 6
Cast iron pedestal only ... ... „ 1 1 0



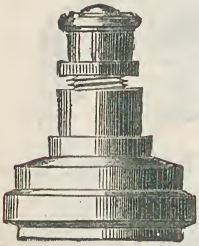
No. 605.—Brass Stuffing Box and Chamber.

On one flange, with copper screws, for pumps.

Each ... 2½-in. 24/6 3-in. 29/6 3½-in. 34/0 4-in. 41/0

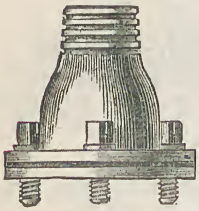
No. 606.—Brass Stuffing Box and Flange only.

	2-in.	2½-in.	3-in.	3½-in.	4-in.
Each	10/0	13/0	16/0	19/0	20/0



No. 607.—Bath Stuffing Box.

	2½-in.	3-in.	3½-in.	4-in.	4½-in.
Each ...	7/6	9/6	12/6	14/0	16/0



No. 608.—Brass Chamber and Flange.

With clack and screws for pumps.

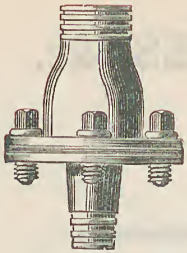
	2-in.	2½-in.	3-in.	3½-in.	4-in.
Each ...	7/9	9/6	12/3	15/0	18/0

No. 609.—Brass Bucket, Leathered.

	2-in.	2½-in.	3-in.	3½-in.	4-in.
Light ... each	3/0	4/0	5/6	7/6	9/6

Extra strong, each—

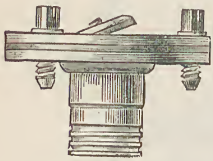
2-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-in.
4/0	5/6	7/0	8/6	10/6	22/0	32/0



No. 610.—Brass Chamber and Tail Pipe.

With clack and screws for pumps.

	diameter				
For pump	2	2½	3	3½	4-in.
Each ...	8/6	11/6	13/9	17/	20/



No. 611.—Brass Tail Pipe and Flange.

With clack and screws for pumps.

	2	2½	3	3½	4-in.
Each	6/9	8/	10/6	14/	17/

No. 612.—Copper Air Vessels.

For deep well pumps, &c.

			1½	1¾	2-in.
Each	...	...	25/0	27/6	30/0

Air vessels should be fixed in all cases where a great length of rising main is required, as a continuous flow of water is insured, and concussion in the pipe prevented.

No. 613.—Strong Copper Air Vessels for Deep Well Pumps.

			1½	1¾	2-in.
Each	...	...	35/0	37/6	40/0

No. 614.—Iron Air Vessels, with dip pipe.

			1½		1¾-in.
Each	...	22/0	&	27/0	32/0
		2		2¼	2½-in.
Each	...	35/0		50/0	55/0
				3	4-in.
Each	...	...	...	72/6	125/0

GARDEN ENGINES, &c.

No. 621.—Garden Engine.

In oval galvanized iron or zinc tub.

To hold 10 gallons, each 55/0 | To hold 16 gallons, each 72/6
„ 12 „ „ 60/0 | „ 24 „ „ 92/6

No. 622.—Garden Engine.

In oval oak tub.

To hold 15 galls., each £5 7 6 | To hold 28 galls., each £6 12 6

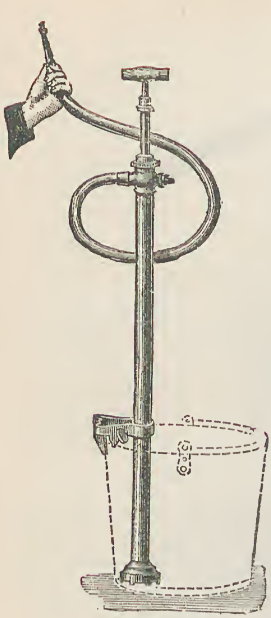
No. 623.—Garden Engine.

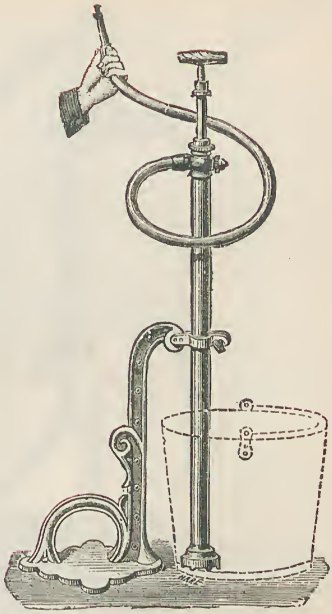
In oval oak tub, fitted with spreader, for watering garden paths, lawns, &c., with cock.

15 gallons ... each £6 12 6 | 28 gallons ... each £7 17 6

Extra for cock, with 6-ft. length of India-rubber suction hose, with union and rose to draw from a pond, 35/0.

By this means the trouble of filling the engine is very much diminished, as the necessity for using buckets, &c., is quite done away with.





No. 624.—The "Handy" Garden Pump.

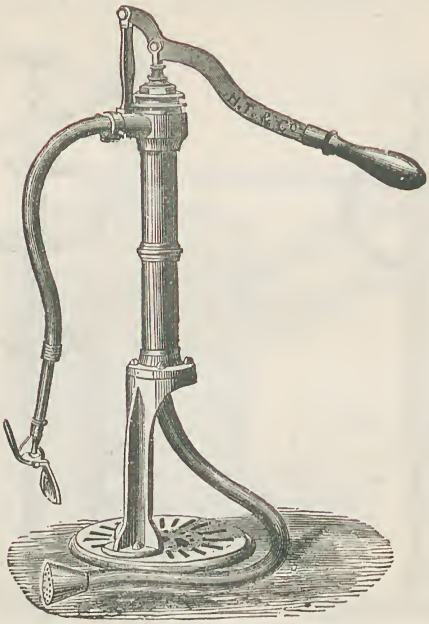
Cheap, simple, and portable.

1-in. barrel ... ... each	12/6
1¼-in. „ ... ... „	15/0

No. 625.

Fixed to ornamental iron standard.

1-in. barrel ... ... each	15/6
1¼-in. „ ... ... „	20/0



No. 626.—Model Garden Engine, with lever handle.
Each ... 32/6

No. 627.—Model Garden Engine.

Complete, fixed in iron pail, with bow handle, each 40/0
" " " " lever " " 42/6

For protection against fire these are of the greatest use, both in private houses and public buildings, as, when fixed in pail, they contain sufficient water to put out the majority of fires at their commencement; whereas, when help has to be fetched from a distance, the fire has often obtained a magnitude too great to be overcome. They are much superior to fire buckets, as they occupy very nearly as little room, and the jet of water can be directed to the exact part where it is most required.

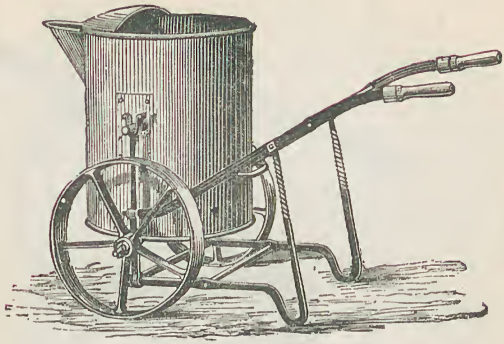
No. 628.—House Fire Engine.

This engine is specially arranged for houses, factories, &c., to be always ready in case of fire, as well as for constant use in cleaning windows, &c. It is also a most useful garden engine. It holds a large quantity of water, but takes little room, and is most easily moved about. By the arrangement of the pump and large air vessel, it throws water with more power than any other engines for the same purpose. It easily discharges a full stream at least 40-ft. high from the jet. It is highly ornamental in appearance.

Each ... 77/6

By an extra connection, price 5/0, on the delivery, a flexible hose can be carried to any distance. Price of hose 1/0 per foot.

The wheels can be covered with India-rubber, for indoor use, for an extra charge of 5/6.



No. 629.—Water Barrow.

With drawing-off cock, for filling watering pots, &c.

The water may either be drawn off by the cock, dipped, or poured out at the lip by "tipping up" the barrow, which is supported on bearings, and provided with a handle near the bottom for that purpose.

To hold 38 gallons ... ... each	£3	15	0
„ 30 „ ... ... „	2	15	0
„ 20 „ ... ... „	2	0	0

If with drawing-off cock, 7/6 extra.

No. 630.—Hop Washing Engine.

This engine is provided with two nozzles and cocks for flexible hose. It is very largely adopted in the hop districts, for washing the hop plants affected by the fly.

16 gallons... ... ... each	£3	15	0
24 „ ... ... „	5	0	0
28 „ ... ... „	6	0	0

No. 631.—Zinc Garden Syringe. (Wood Plunge.)

Each ... ... No. 1, 1/3 No. 2, 1/6 No. 3, 1/9 No. 4, 2/0

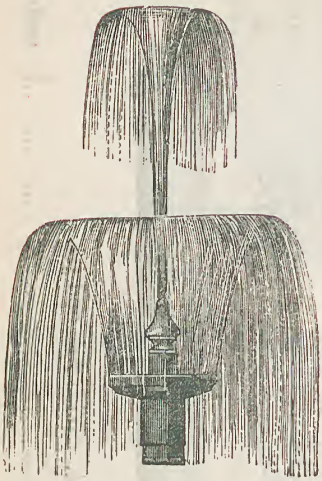
No. 632.—Brass Garden Syringe. With rose and jet.

Each	12-in. by 1-in.	Best	3/6	Seconds 2/0
„	14-in. „ 1¼-in.	„	5/6	„ 2/9
„	16-in. „ 1½-in.	„	7/6	„ 4/0

No. 633.—Brass Garden Syringe. REED's Patent. With rose and jet.

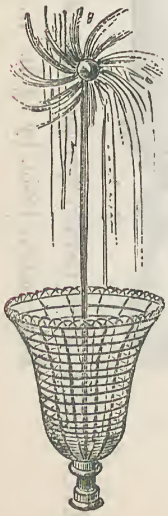
Best quality. 18-in. by 1½-in. ... ... each 12/6

FOUNTAIN JETS.



No. 634.—Reverse Sheet.

Large	each	8/6
Small	„	5/0



No. 635.—Fountain Basket.

With jet and ball.

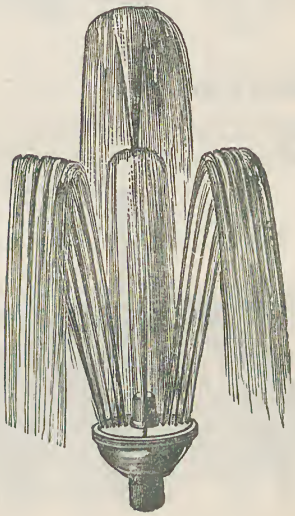
12-in. in diameter	each	15/0
6-in. „	„	10/0
Gilt balls for ditto	„	2/6

No. 636.—Convolvulus.

Large	each	8/6
Small	,,	5/0

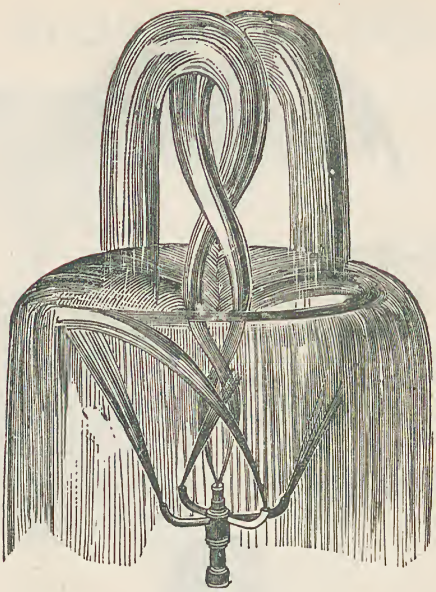
No. 637.—Prince of Wales's Feathers.

Large	each	7/0
Small	,,	4/6



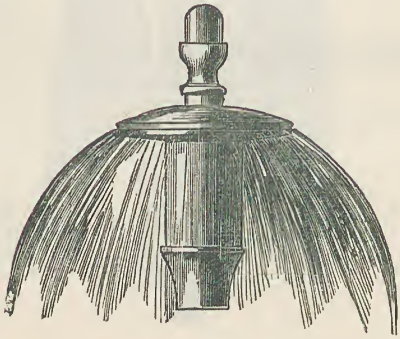
No. 638.—Crown.

Large	each	7/6
Small	,,	5/0



No. 639.—Barker's Mill.

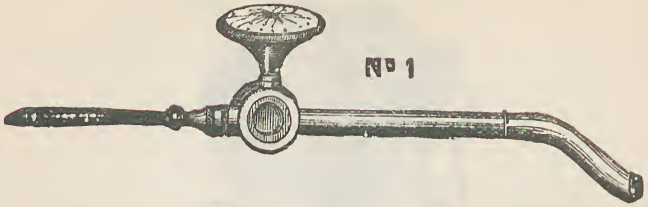
Large	each	10/6
Small	„	6/6

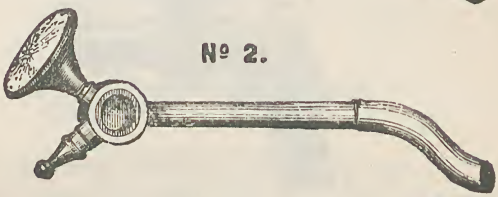


No. 640.—Sheet.

Large	each	8/6
Small	„	5/0

HOSE FITTINGS.





No. 641.—The Twin Jet and Rose Branch Pipe.

No. 1 sketch shows the jet open. No. 2 sketch shows the jet closed. No. 3 sketch shows the rose open.

The rose and jet in this Water Director are both attached to a barrel moving upon a fixed plug. The change from rose to jet is made by moving the one required into a line with the hand-pipe. In each case the water-way is direct, giving out the full pressure.

Only one hand is required to make the change—an important improvement when attached to the Hydropult or Garden Engine.

The rose and jet can both be unscrewed for cleaning.

To fit ½-in. bore hose pipe, each 4/6 | To fit ⅝-in. bore hose pipe, each 5/6
To fit ¾-in. bore hose pipe, each 5/6

No. 642.—Strong Taper Copper Branch Pipes.

With gun-metal nozzles, and male screw for hose.

Each 1¼-in. 12/, 1½-in. 14/6, 1¾-in. 16/, 2-in. 20/, 2½-in. 24/, 3-in. 27/6

No. 643.—Branch Pipe.

With cock, rose, and jet.

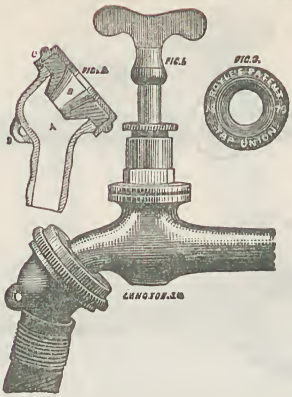
	½-in.	⅝-in.	¾-in.	1-in.
Each	2/	3/	3/9	5/

No. 644.—Spreaders.

	½-in.	⅝-in.	¾-in.	1-in.
Each	1/5	1/9	2/	3/

No. 645.—Hose Unions.

	½-in.	⅝-in.	¾-in.	1-in.
Each	1/	1/3	1/8	2/5



No. 645a.—Royle's Patent Tap Union.

A unique device for connecting flexible hose to ordinary domestic water taps, without requiring any screw or other preparation on the tap.

Its advantage over the ordinary union is obvious. No screw being required, it will fit any tap about the house. To make the connection to the tap it is simply pushed on; the water pressure makes the joint, and its principle of action is such that the greater the pressure the tighter the joint becomes, and the more firmly it holds on to the tap. It cannot leak.

The device consists of an india-rubber lip ring held in a brass casing connected by the tail-piece to the hose. The bib of the tap is simply pushed through this india-rubber lip ring until the union is in position, and the water may then be turned on. The pressure of the water around the lip ring causes it to contract and grip the bib of the tap, and so effectually holds it on against the pressure.

Directions for Using.

Wet the ring before using, and then push the union on to the tap as far as it will go.

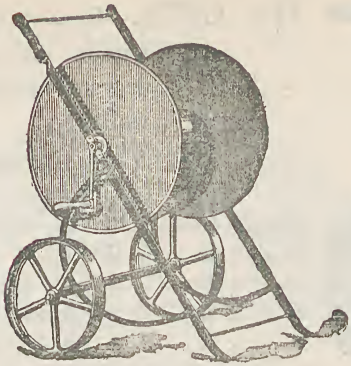
Standard Sizes.

No.	1	2	3	4
Size of tap it will connect to	½-in.	⅝-in.	¾-in.	1-in.
Size of hose for which it is prepared	½-in.	⅝-in.	¾-in.	1-in.
Each	2/0	3/0	4/0	5/0
Spare Rings	6d.	8d.	10d.	1/0

Odd Sizes.

To meet occasional requirements, a stock is kept of the following odd sizes. In ordering be particular to say size of tap and size of hose you wish to connect. If you have any doubt as to size of a tap, send us a rubbing of the mouth of the tap.

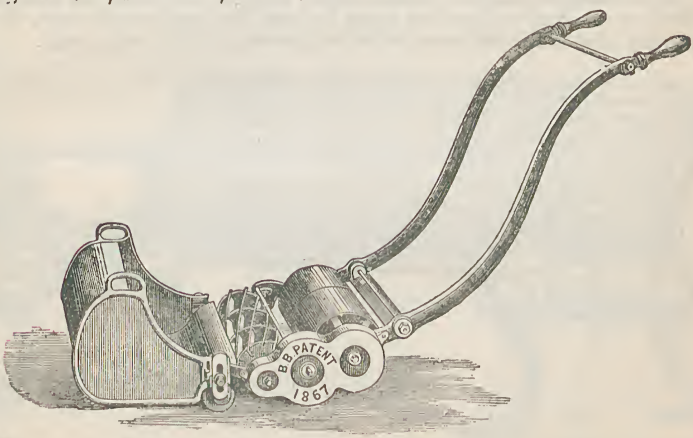
To fit ⅜-in. tap and ⅜-in. hose	2/0
,, ⅜-in. ,, ½-in. ,,	2/0
,, ½-in. ,, ⅜-in. ,,	2/0
,, ⅝-in. ,, ½-in. ,,	3/0
,, ¾-in. ,, ⅝-in. ,,	4/0
,, ¾-in. ,, ½-in. ,,	4/0



No. 646.—Improved Wrought Iron Hose Reels.

For garden use, also very useful for carrying hose for pumps, fire engines, &c.

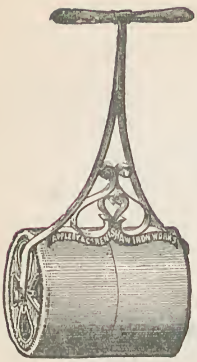
	Painted Iron.	Galvanized Iron.			
No. 0.	13/6	15/9	will hold	100-ft. ½-in. hose,	or 60-ft. ¾-in. do.
„ 1.	18/6	21/0	„	180-ft. „ „	120-ft. „
„ 2.	21/0	23/9	„	300-ft. „ „	180-ft. „
„ 3.	24/6	28/0	„	300-ft. ¾-in. „	200-ft. 1-in. do.
„ 4.	28/6	31/6	„	400-ft. „ „	280-ft. „



No. 647.—Lawn Mowers.

All sizes, to work either by hand, pony, or horse power.

Prices on application.



No. 647a.—Garden Rollers, balance handle and rounded edges, preventing marks on grass or walks.

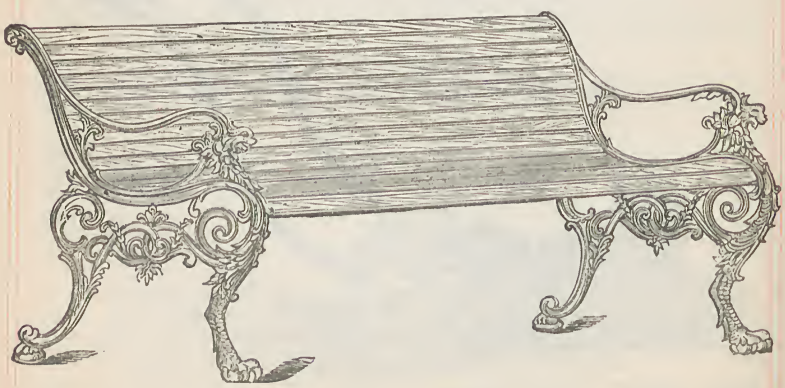
SINGLE CYLINDERS.

	Cwt.	qrs.	lbs.		
16-in. × 16-in.	2	0	4	each	28/0
18 „ × 18 „	2	2	0	„	35/6
20 „ × 20 „	2	3	9	„	39/6
22 „ × 22 „	3	2	21	„	47/0
24 „ × 24 „	4	0	14	„	57/6

DOUBLE CYLINDERS.

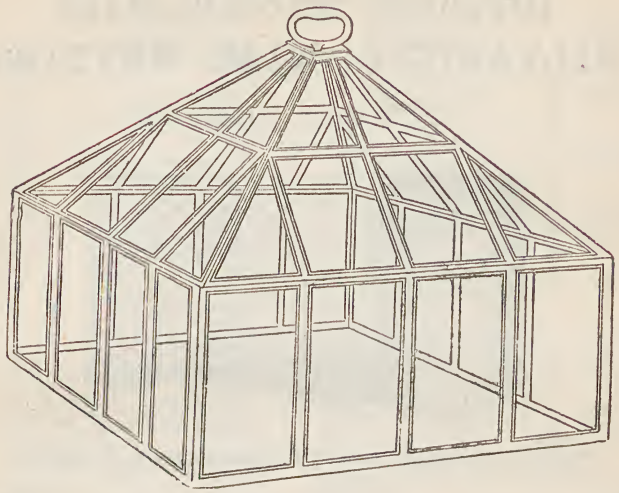
	Cwt.	qrs.	lbs.		
16-in. × 18-in.	2	1	4	each	37/6
18 „ × 20 „	2	2	14	„	45/0
20 „ × 22 „	2	3	20	„	50/0
22 „ × 24 „	3	2	26	„	60/0
24 „ × 26 „	3	3	14	„	67/6
26 „ × 30 „	6	3	7	„	92/0

Both Double and Single Cylinder Rollers have rounded edges and balance handles; the centre pieces are bored out and the shaft turned to fit, the meeting edges of the double cylinders being carefully faced in the lathe.



No. 647b.—Garden Seats.

Illustrations and Prices on application.



No. 647c.—Garden Hand Frames, CAST IRON, open tops.

	12-in.	14-in.	16-in.	18-in.	20-in.	22-in.	24-in.
Each	3/6	4/3	5/0	6/0	7/3	9/0	10/0

Ditto, glazed with 15-oz. glass.

Each	6/3	7/6	8/6	10/0	11/9	14/0	15/9

No. 647d. (late 669.)—ZINC, open tops.

	12-in.	14-in.	16-in.	18-in.	20-in.	22-in.	24-in.
Each... ...	4/6	5/0	5/6	6/0	6/6	7/0	7/6

Ditto, glazed with 15-oz. glass.

Each	7/3	8/3	9/0	10/0	11/0	12/0	13/3

No. 647e.—ZINC, close tops.

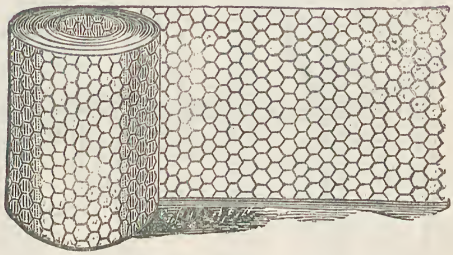
	12-in.	14-in.	16-in.	18-in.	20-in.	22-in.	24-in.
Each... ...	3/6	4/0	4/6	5/0	5/6	6/0	6/6

Ditto, glazed with 15-oz. glass.

Each	6/3	7/3	8/0	9/0	10/0	11/0	12/3

IMPROVED MACHINE-MADE GALVANIZED WIRE NETTING.

DIAMOND MESH.



Prices per lineal yard 2 feet wide, other widths in proportion.

Mesh.	Gauge.	Galvanized after made.	Mesh.	Gauge.	Galvanized after made.
½-in.	22	2/9	1½-in.	19	6d.
,,	20	3/0	,,	18	7d.
⅝-in.	22	2/0	,,	17	9d.
,,	20	2/3	,,	16	11d.
¾-in.	20	1/3	1⅝-in.	19	4¾d.
,,	19	1/6	,,	18	6d.
,,	18	1/9	,,	17	7d.
⅞-in.	19	1/2	,,	16	9d.
,,	18	1/4	2-in.	19	4¼d.
,,	17	1/9	,,	18	5d.
,,	16	2/3	,,	17	6½d.
1-in.	19	11d.	,,	16	8d.
,,	18	1/1½	2½-in.	19	4d.
,,	17	1/6	,,	18	5d.
,,	16	2/0	,,	17	6d.
1⅛-in.	19	10d.	,,	16	7d.
,,	18	1/0	3-in.	19	3d.
,,	17	1/5	,,	18	4d.
,,	16	1/8	,,	17	5d.
1¼-in.	19	9d.	,,	16	6d.
,,	18	11d.	3½-in.	19	2⅞d.
,,	17	1/3	,,	18	3½d.
,,	16	1/6	,,	17	4d.
			,,	16	5d.

½-in. to 1¼-in. mesh made any width up to 4 feet.

1⅝-in. to 3½-in. up to 6-ft. 4-in and 6-in. mesh may also be had.

Prices in proportion. Discount °/₀

TUBING.

No. 649.—Delivery Hose.

Made of Vulcanized Rubber, combined with Layers of Strong Canvas, for Railway purposes, Brewers, Distillers, Fire Engines, Watering Gardens, Plumbers, &c.

ONE PLY... ... ... Is for conveying liquids where but little pressure is used.
TWO PLY... ... ... Will bear a moderate degree of pressure.
THREE PLY ... ... For Brewers, Watering Gardens, and general purposes.
FOUR AND FIVE PLY ... ... For Fire Engines, Fire Mains, and sustaining great pressure.

Internal dia.	½	⅝	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4-in.
Price per Foot. 1 Ply	0/6	0/7	0/8	0/11	1/1½	1/4	1/6	1/8½	1/11	2/1	2/3	2/5	2/8	2/9	3/0	3/2
2 Ply	0/7½	0/8½	0/9½	1/1	1/4	1/6	1/9	2/0	2/2	2/3	2/6	2/9	3/2	3/3	3/7	3/10
3 Ply	0/8½	0/9½	0/11	1/3½	1/6	1/9	2/0	2/3	2/6	2/9	3/0	3/3	3/8	4/0	4/4	4/9
4 Ply	0/10	0/11	1/1	1/6	1/11	2/1	2/4	2/7	2/11	3/3	3/8	4/1	4/6	4/9	5/1	5/7
5 Ply	1/0	1/2	1/4	1/9	2/3	2/6	2/9	3/0	3/6	4/0	4/8	5/1	5/6	5/11	6/4	7/0

Made in 60-ft. lengths; when required to exceed 60-ft. in one length, the price will be 5 per cent. extra.

No. 650.—Suction Hose, with a Spiral Wire inside.

TWO PLY, THREE PLY ... ... For ordinary Pumps and Manure Carts.
FOUR PLY, FIVE PLY, AND SIX PLY ... For Locomotives, Fire Engines, Diving and great pressure.

Internal dia.	½	⅝	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4-in.
Price per Foot. 2 Ply	0/9	0/10½	0/11	1/3	1/7	1/10	2/2	2/4	2/8	3/1	3/4	3/8	4/0	4/4	4/8	5/6
3 Ply	0/10	0/11½	1/0	1/5	1/10	2/1	2/4	2/8	3/0	3/5	3/9	4/3	4/7	5/0	5/3	6/0
4 Ply	1/0	1/3	1/4	1/8	2/0	2/3	2/8	3/0	3/4	3/10	4/4	4/10	5/3	5/8	6/2	6/8
5 Ply	1/6	1/8	1/9	2/1	2/4	2/7	3/0	3/5	3/11	4/4	4/11	5/4	5/11	6/4	6/9	7/3
6 Ply	2/0	2/3	2/6	2/10	3/0	3/4	3/9	4/3	4/9	5/4	5/8	6/2	6/9	7/1	8/0	8/6

No. 651.—Embedded Suction Hose.

The Spiral Wire being embedded in the Rubber, Liquids cannot come in contact with the wire in passing through the Hose.
Made any length up to 60 feet.

Internal dia.	⅝	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4-in.
Price per Foot. 2 Ply	0/11	1/0	1/4	1/8	1/11	2/3	2/7	2/11	3/4	3/8	4/1	4/6	5/0	5/6	6/0
3 Ply	1/0	1/1	1/6	1/11	2/2	2/6	2/10	3/3	3/7	4/2	4/6	5/0	5/6	6/0	6/6
4 Ply	1/4	1/6	1/9	2/2	2/4	2/9	3/3	3/9	4/0	4/5	5/0	5/6	6/0	6/6	7/0
5 Ply	1/10	2/0	2/3	2/6	2/8	3/0	3/6	4/0	4/6	5/0	5/6	6/0	6/6	7/0	7/6

No. 652.—Brewers' Hose, specially prepared for Beer and Ale.

Internal dia.	⅝	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4-in.
Price per Foot. 2 Ply	0/10	0/11	1/2	1/5	1/7½	1/11	2/3	2/5	2/6	2/10	3/1	3/7	3/8	4/1	4/4
3 Ply	1/0	1/2	1/6	1/9	2/0	2/2	2/6	2/9	3/0	3/4	3/7	4/1	4/5	4/10	5/3
4 Ply	1/4	1/6	1/11	2/3	2/6	2/8	2/10	3/2	3/6	4/0	4/5	4/11	5/1	5/7	6/1
5 Ply	1/7	1/10	2/4	2/9	3/0	3/4	3/9	4/1	4/5	4/10	5/3	5/10	6/2	6/9	7/0

Solid Rubber Drab Tubing for Brewers' Hand-Joints, where great flexibility is required ... ... Per foot

⅝	¾	1	1¼	1½	1¾	2-in.
0/11	1/2	1/9	2/3	2/9	3/3	3/10

N.B.—Solid Rubber Tubing will not answer for pressure.

No. 653.—Sewn Leather Delivery Hose.

Per foot 1½-in. 1/9 1¾-in. 1/11 2-in. 2/2 2¼-in. 2/4 2½-in. 2/5 3-in. 3/2

No. 654.—Sewn Leather Suction Hose. On Wire.

Per foot 1½-in. 3/4 1¾-in. 3/10 2-in. 4/5 2¼-in. 5/0 2½-in. 5/6 3-in. 6/8

No. 655.—Copper Rivetted Leather Delivery Hose.

Per foot 1½-in. 2/0 1¾-in. 2/3 2-in. 2/6 2¼-in. 2/9 2½-in. 3/0 3-in. 3/9 3½-in. 4/6 4-in. 5/0

No. 656.—Copper Rivetted Leather Suction Hose.

Per foot 1½-in. 4/3 1¾-in. 4/6 2-in. 4/9 2¼-in. 5/0 2½-in. 5/6 3-in. 6/6 3½-in. 7/6 4-in. 8/6

No. 657.—Woven Canvas Hose.

Without any combination of India-rubber. For Fire Engines, Agriculture, and Ships' Pumps, &c.

Interior diameter	1	1¼	1½	1¾	2	2¼	2½	3	3½	4-in.
Per foot	0/4	0/5	0/6	0/7	0/8	0/9	0/10	1/0	1/2	1/4

N.B.—In ordering, state exact outside diameter of screw union, as woven canvas hose will not stretch.
A full roll measures about 900 feet.

No. 658.—Rubber-lined Woven Canvas Hose (Tanned).

As used by Fire Brigades, &c.

Interior diameter	½	⅝	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3½	4-in.
Light make, per foot ...	0/7	0/8	0/9	0/10	0/11½	1/1	1/3	1/6	1/8	1/10	2/1	2/3	2/6	2/9
Stout make ,, ...	—	—	—	1/0	1/2	1/4	1/6½	1/9½	2/0	2/3	2/6	2/9	3/1	3/6

No. 659.—Welded Iron Tubes and Fittings.

For Gas, Steam, and Water.

TUBES.

Inside diameter... ...	⅛	¼	⅜	½	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3½	4-in.
Tubes, from 2 to 14 feet ... per foot	0/2	0/2½	0/3	0/4½	0/6	0/8½	0/11	1/2	1/6	1/9	2/7	3/3	4/0	4/6	5/6	7/0
Tubes, from 12 to 23½ inches ... each	0/4	0/5	0/7	0/9	1/0	1/4	1/8	2/0	2/6	3/0	4/6	6/3	7/6	9/0	11/6	14/6
Tubes, from 3 to 11½ inches ... each	0/2	0/3	0/4	0/6	0/8	0/11	1/1	1/4	2/0	2/3	4/0	4/9	6/0	7/0	8/0	9/0
Connecting Tube, 12 to 23½ inches, each	0/5	0/7	0/9	0/11	1/2	1/6	2/0	2/6	3/3	4/0	5/6	7/0	8/6	10/0	12/6	15/6
Connecting Tube, 3 to 11½ inches ... each	0/4	0/5	0/6	0/8	0/10	1/0	1/3	2/0	2/6	3/0	4/6	5/6	6/6	7/6	8/6	10/0
Tubular Bends and Lamp Bends, each	0/5½	0/6½	0/7	0/8	0/11	1/3	1/9	2/3	3/3	4/3	6/6	10/0	12/0	16/0	25/0	32/6
Springs, various Elevations ... each	0/4	0/5	0/6	0/7	0/9	0/11	1/4	1/8	2/6	3/3	5/6	7/6	10/0	12/0	19/0	26/0

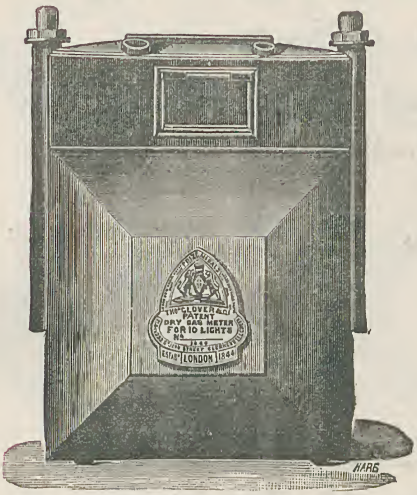
FITTINGS.

Socket and Pipe Unions, Wt. Iron	⅛	¼	⅜	½	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3½	4-in.
	—	2/0	2/6	3/0	4/0	5/6	6/9	8/0	9/0	10/0	12/0	14/0	16/0	18/0	22/0	28/0
Elbows, Equal or Diminished, each	0/6	0/6½	0/7	0/8	0/10	1/2	1/9	2/3	3/0	3/6	5/6	8/6	11/0	14/0	22/0	28/0
Tees, Equal or Diminished ... each	0/6	0/6½	0/7	0/9	1/0	1/3	1/9	2/6	3/0	3/9	6/0	9/6	12/6	16/6	24/0	30/0
Crosses, Equal or Diminished ... each	0/10	1/0	1/0	1/5	1/9	2/3	3/0	3/6	4/6	5/3	10/6	16/0	21/0	30/0	42/0	50/0
Sockets, Plain ... each	0/1½	0/1½	0/2	0/3	0/3½	0/4	0/6	0/7	0/9	1/0	1/6	2/6	3/0	3/6	5/0	6/0

Inside diameter ...	⅛	¼	⅜	½	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3½	4-in.
Sockets, Diminished, each	—	0/3	0/4	0/5	0/6	0/7	0/9	0/11	1/1	1/3	2/0	3/0	4/0	5/0	7/0	9/0
Flanges, each	0/8	0/9	0/10	1/0	1/2	1/4	1/6	1/9	2/0	2/6	3/9	5/0	6/9	8/6	10/0	11/6
Caps and Plugs, each	0/2	0/3	0/3	0/4	0/5	0/6	0/8	0/10	1/0	1/3	2/0	2/6	3/6	4/9	7/0	10/0
Backnuts and Nipples ... ... each	0/1	0/2	0/2	0/3	0/3½	0/4	0/6	0/8	0/10	1/0	1/9	2/3	3/0	3/6	4/6	5/6
Union Bends, or Elbows ... each	—	2/6	3/0	3/9	5/0	6/3	8/6	10/0	11/6	13/6	16/0	19/0	22/0	25/0	30/0	36/0
Elbows, Round Backed, Wt. Iron ... each	0/7	0/7	0/8	0/9	1/0	1/4	1/11	2/6	3/4	3/10	6/6	10/0	13/0	16/0	25/0	32/0
Iron Main Cocks, each	2/3	2/3	2/9	3/6	4/6	6/6	8/6	11/0	14/0	18/0	27/0	36/0	44/0	50/0	75/0	90/0
Iron Main Cocks, Brass Plugs, each	—	—	4/6	5/6	7/6	10/6	15/0	19/6	25/0	32/0	47/0	60/0	90/0	110/0	140/0	190/0
Iron Main Cocks, Roundway .. each	—	—	3/6	4/0	5/6	7/6	10/0	13/0	17/6	22/0	38/0	54/0	62/0	70/0	100/0	160/0
Iron Main Cocks, Roundway, Brass Plugs ... each	—	—	5/0	6/6	9/0	13/0	19/0	28/0	36/0	42/0	60/0	85/0	105/0	120/0	180/0	280/0
Spanners, for Cocks, Wt. Iron ... each	—	—	1/0	1/4	1/8	2/0	2/4	3/0	3/6	4/0	4/9	6/0	7/6	9/0	12/0	14/0
Spanners, for Cocks, Malble. Ct. Iron, each	—	—	0/7	0/8	0/10	1/2	1/8	2/2	2/9	3/3	4/9	6/0	7/6	9/0	12/0	14/0
Syphon Boxes, 1 Quart ... each	—	—	—	11/0	12/0	13/0	14/0	15/0	15/6	16/0	18/0	—	—	—	—	—
Syphon Boxes, 2 Quarts ... each	—	—	—	—	16/0	17/0	18/0	19/0	21/0	23/0	25/0	30/0	35/0	40/0	—	—
Syphon Boxes, 3 Quarts ... each	—	—	—	—	20/0	22/0	24/0	25/0	26/6	28/0	32/0	35/0	40/0	45/0	50/0	56/0
Syphon Boxes, 4 Quarts ... each	—	—	—	—	21/0	23/0	25/0	27/0	29/0	31/0	34/0	38/0	42/0	47/0	54/0	60/0
Malleable Cast Round Elbow ... each	0/6	0/6½	0/7	0/8	0/10	1/2	1/9	2/3	3/0	3/6	5/6	9/0	12/0	15/0	30/0	40/0

THOMAS GLOVER & CO.'S

DRY GAS METERS.



No. 659a.

		Net Trade Prices.	Stamping.
1	light... ... ... each	£1 0 6	... ... 6d.
2	,, ... ,,	1 4 6	... ... 6d.
3	,, ... ,,	1 10 0	... ... 6d.
5	,, ... ,,	1 16 6	... ... 6d.
10	,, ... ,,	2 7 0	... ... 1/0
20	,, ... ,,	3 5 0	... .. 1/0
30	,, ... ,,	4 10 0	... ... 1/0
40	,, ... ,,	5 10 0	... ... 1/0
50	,, ... ,,	6 5 0	... ... 1/0
60	,, ... ,,	8 8 0	... ... 2/0
80	,, ... ,,	10 12 0	... ... 3/0
100	,, ... ,,	13 15 0	... ... 3/0
150	,, ... ,,	18 17 0	... ... 5/0
200	,, ... ,,	25 4 0	... ... 6/0
250	,, ... ,,	28 15 0	... ... 8/0
300	,, ... ,	34 5 0	... ... 9/0
400	,, ... ,,	44 0 0	... ... 14/0
500	,, ... ,,	55 0 0	... ... 20/0

All Gas Meters carefully and skilfully repaired at moderate charges.

No. 660.—Cast Iron Flange Pipe.

	1½-in.	2-in.	2½-in.	3-in.	4-in.	5-in.	6-in.
Per yard	2/3	3/0	3/6	4/0	6/0	8/0	10/0

No. 661.—Bolts, Nuts, and India-Rubber Washers for Cast Iron Pipe.

	1½-in.	2-in.	2½-in.	3-in.	4-in.	5-in.	6-in.
Per set	9d.	10d.	1/0	1/3	1/6	2/0	2/6

No. 662.—Cast Iron Flanged Elbows.

	1½-in.	2-in.	2½-in.	3-in.	4-in.	5-in.	6-in.
Each	4/3	6/4	7/6	8/8	11/0	14/6	19/0

Including bolts, nuts, and washers.

No. 663.—Cast Iron Socket Pipe.

	1½-in.	2-in.	2½-in.	3-in.	4-in.	5-in.	6-in.
Per yard	1/9	2/3	2/9	3/0	4/6	6/0	8/0

No. 664.—Strong Brazed Copper Pipe.

Tinned inside.

For deep wells, recommended for its freedom from corrosion, its durability and lightness, proved to a pressure of 150 pounds per inch.

	1-in.	1¼-in.	1½-in.	1¾-in.	2-in.	2¼-in.	2½-in.	2¾-in.	3-in.
Per foot	1/0	1/3	1/6	1/9	2/3	2/6	3/3	3/9	4/0

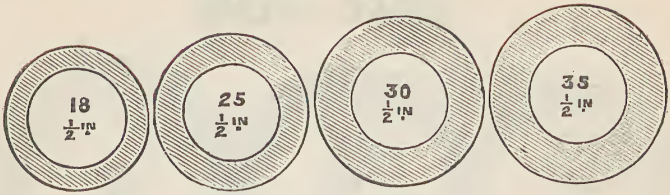
Elbows for the above, up to 2-in., 1/0 per foot extra.
Ditto, above 2-ins. ... ... 1/6 „ „

No. 665.—Connecting Flanges for Copper Pipe.

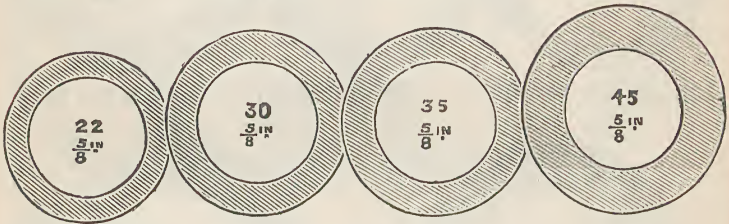
With leather flange and screws.

	1¼-in.	1½-in.	1¾-in.	2-in.	2½-in.	3-in.
Each	5/10	6/8	7/6	8/4	10/0	11/0

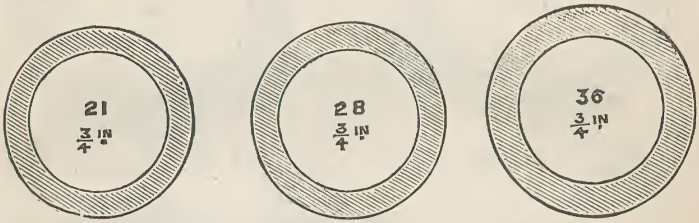
LEAD PIPE.



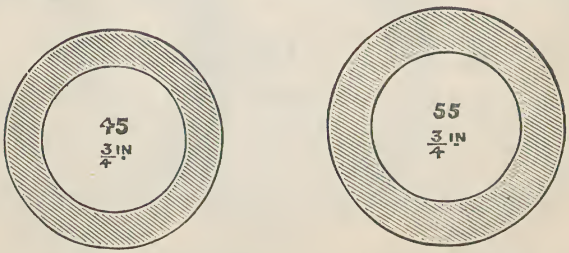
½ in., 3½ lbs. per yard. | 5 lbs. per yard. | 6 lbs. per yard. | 7 lbs. per yard.



⅝ in., 4½ lbs. per yard. | 6 lbs. per yard. | 7 lbs. per yard. | 9 lbs. per yard.

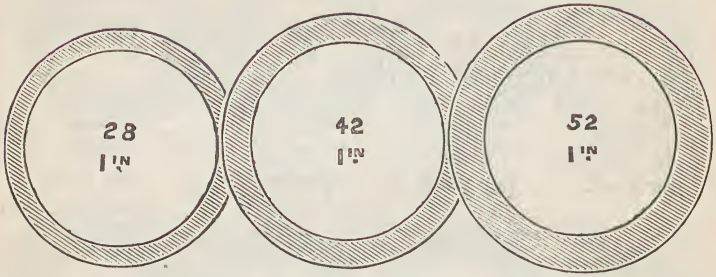


¾ in., 4¼ lbs. per yard. | 5½ lbs. per yard. | 7¼ lbs. per yard.

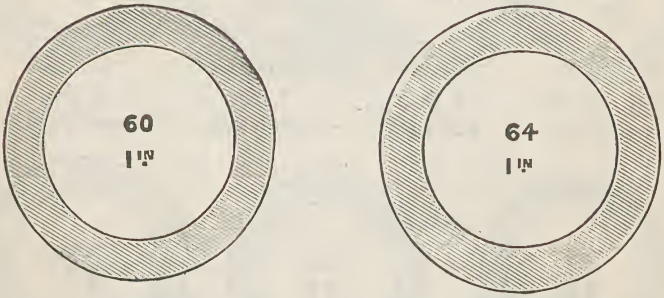


¾ in., 9 lbs. per yard. | 11 lbs. per yard.

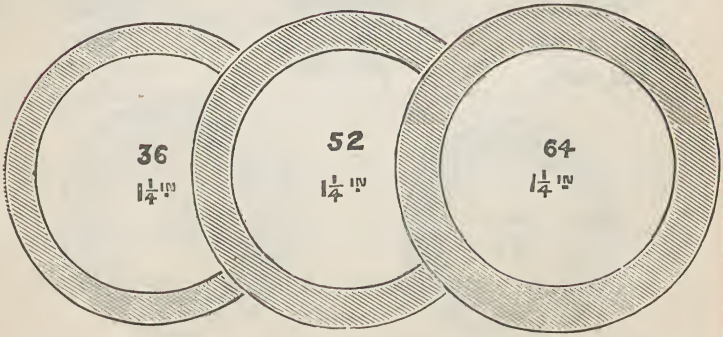
LEAD PIPE.



1 in, $5\frac{1}{2}$ lbs. per yard. $8\frac{1}{2}$ lbs. per yard. $10\frac{1}{4}$ lbs. per yard.

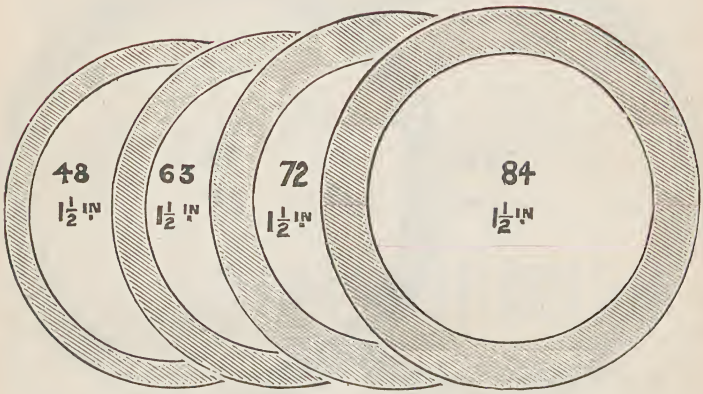


1 in., 12 lbs. per yard. 13 lbs. per yard.

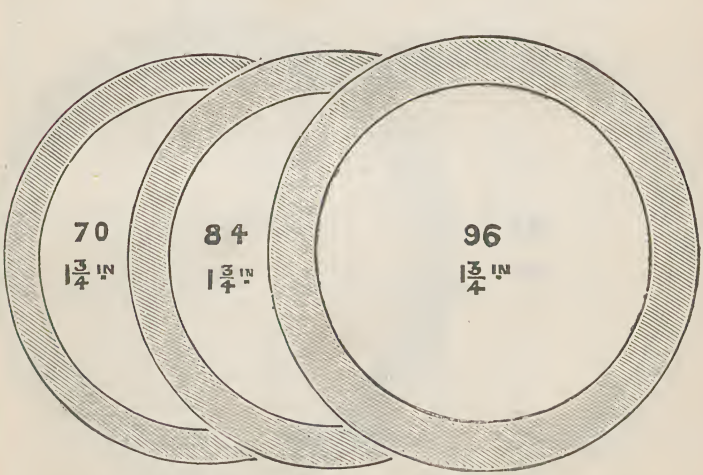


1¼ in., 9 lbs. per yard. 13 lbs. per yard. 16 lbs. per yard.

LEAD PIPE.

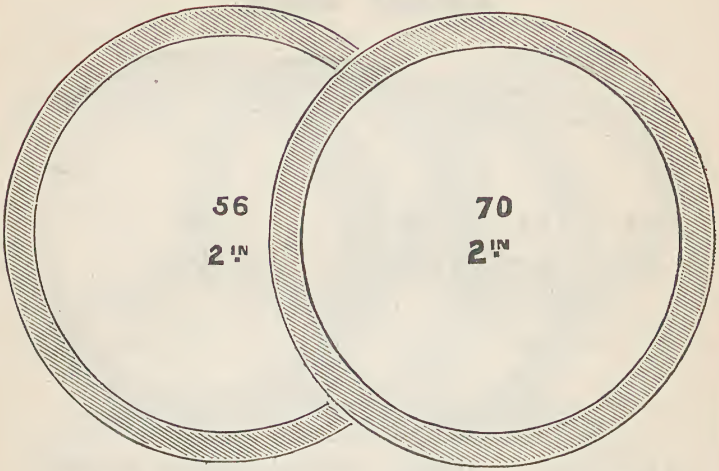


1½ in., 12 lbs. per yard. | 16 lbs. per yard. | 18 lbs. per yard. | 21 lbs. per yard.

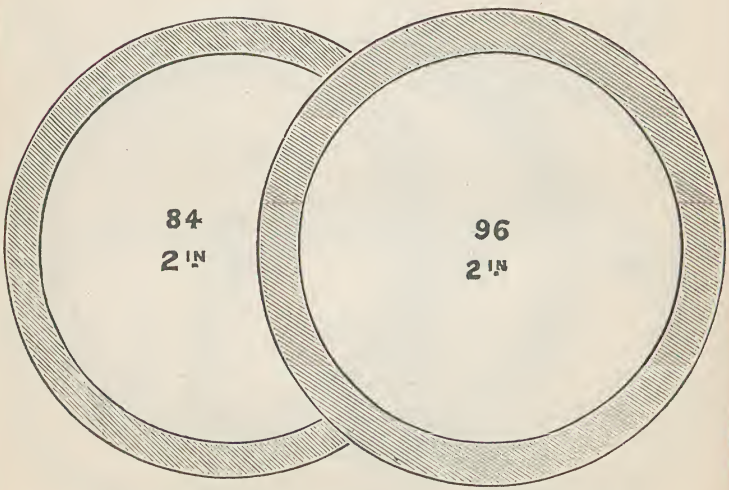


1¾ in., 17 ½ lbs. per yard. | 21 lbs. per yard. | 24 lbs. per yard.

LEAD PIPE.



2 in., 14 lbs. per yard. 17½ lbs. per yard.



2 in., 21 lbs. per yard. 24 lbs. per yard.

PATENT LEAD-ENCASED BLOCK-TIN PIPE.

This improved Piping is offered as a substitute for leaden pipes for the conveyance of water and other potable liquids. It consists of an inner pipe of pure block tin, encased by one of lead; these pipes are so united at their surfaces of contact as to be inseparable by any contortion; the casing of lead forms a protective coating to the tin pipe, and, being of much greater thickness than the latter, imparts to the pipe, in its combined form, the physical qualities which characterise leaden pipes, while the perfect continuity of the tin pipe protects the water from that contamination by lead which so frequently results from the employment of ordinary pipe.

Table of weights per yard of Patent "Lead-encased Block-Tin Pipe."

Head of Water in Feet.	Corresponding Pressure in lbs. per square inch.	⅜-in. Diameter.		½-in. Diameter.		⅝-in. Diameter.		¾-in. Diameter.	
		Lbs. per yard.	Average length of Coils in yards.	Lbs. per yard.	Average length of Coils in yards.	Lbs. per yard.	Average length of Coils in yards.	Lbs. per yard.	Average length of Coils in yards.
For 50 and under...	21·7	2½	38	3½	32	4½	26	5½	36
,, 250 ,, ...	108·5	3	34	4	28	5¼	37	6	33
,, 500 ,, ...	217	3½	30	4½	25	6	33	7	28

Head of Water in Feet.	Corresponding Pressure in lbs. per square inch.	1-in. Diameter.		1¼-in. Diameter.		1½-in. Diameter.		2-in. Diameter.	
		Lbs. per yard.	Average length of Coils in yards.	Lbs. per yard.	Average length of Coils in yards.	Lbs. per yard.	Average length of Coils in yards.	Lbs. per yard.	Average length of Coils in yards.
For 50 and under...	21·7	7¼	27	9	22	11	17	16	12
,, 250 ,, ...	108·5	8	25	10	19	12½	15	18½	12
,, 500 ,, ...	217	9	22	12	16	14	14	21	12

Pipes of 2¼, 2½, 3, 3½, 4, 5, and 6-in. diameter can be made to order, and of any weight desired, at a short notice.

LEAD BARRELLING.

In 10-ft. lengths.

2¼-in. 96-lbs.	per 10-ft. length
2½-in. 84, 96, 120-lbs.	,, ,,
3-in. 116, 134, 150-lbs.	,, ,,
3½-in. 135, 156, 166, 175-lbs.	,, ,,
4-in. 156, 166, 184, 196-lbs.	,, ,,
4½-in. 200, 250-lbs.	,, ,,
5-in. 254, 280-lbs.	,, ,,
6-in. 330-lbs.	,, ,,

LEAD SOIL PIPE.

2-in.	equal to 6-lbs. lead,	weight per 12-ft. length,	40-lbs.	
2½-in.	,, 5 & 7-lb. lead	,, 10-ft.	,,	34 & 56-lbs.
3-in.	,, ,, ,,	,, ,,	,,	38 & 60-lbs.
3½-in.	,, ,,	,, ,,	,,	48 & 68-lbs.
4-in.	,, 6, 7, 8 & 9-lb. lead	,, ,,	,,	56, 70, 80 & 90 lbs.
4½-in.	,, 6, 7 & 8-lb.	,, ,,	,,	75, 84 & 100-lbs.
5-in.	,, 7 & 8-lb.	,, ,,	,,	90 & 100-lbs.
6-in.	,, 8-lb.	,, ,,	,,	120-lbs.

COMPOSITION GAS PIPE.

⅛	in.	3 oz.	per yard.	
3/16	,,	5 oz.	,,	
¼	,,	9 oz.	,,	
5/16	,,	13 oz.	,,	
⅜	,,	17 oz.	,,	
7/16	,,	21 oz.	,,	
½	,,	26 oz.	,,	
9/16	in.	28 oz.	per yard.	
⅝	,,	46 oz.	,,	
¾	,,	3¼ lbs.	,,	
⅞	,,	4 lbs.	,,	
1	,,	5 lbs.	,,	
1¼	,,	6½ lbs.	,,	

In coils about ½ cwt. each.

BLOCK TIN PIPE.

¼	in.	7 oz.	per yard.	
5/16	,,	9 oz.	,,	
⅜	,,	11 oz.	,,	
7/16	,,	14 oz.	,,	
½	,,	17 oz.	,,	
⅝	in.	23 oz.	per yard.	
¾	,,	30 oz.	,,	
⅞	,,	38 oz.	,,	
1	,,	48 oz.	,,	

MILLED LEAD, in Sheets.

3-lbs.
4-lbs.
5-lbs.
6-lbs.
7-lbs.
8-lbs.

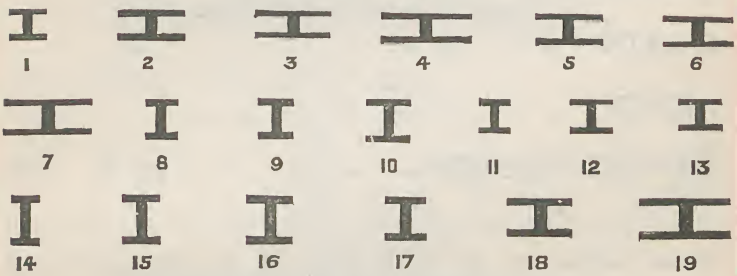
Can be supplied of any weight, say from 2-lbs. to 20-lbs. per square foot.

Sheet Lead milled specially for CHEMICAL WORKS, guaranteed wholly of soft pig lead.

LAMINATED LEAD, for damp walls.

Usual weights, 4-oz. and 5-oz. per square foot, packed in 1 cwt. boxes.

WINDOW LEAD.



PATENT SHOT.

LARGE.—3A, 2A, A, 3B, 2B, B.
SMALL.—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, Dust.
MOULDED SHOT.—SG, SSG, SSSG.
CHILLED SHOT in all sizes, as above.

TEA LEAD.

BEST INCORRODIBLE AND SPECIAL BRIGHT.

Can be supplied in any weights from 1-oz. per square foot.

USUAL WEIGHTS, 4-oz. and 5-oz. per square foot. Packed for export as desired, in either square dove-tailed cases, or cylinder cases, zinc lined.

FROSTY METAL AND CANISTER METAL, &c., &c.

Tinned Sheet Lead. Lead Pipe washed with tin.

LEAD ENCASED BLOCK TIN PIPE.

Lead Nails for slating. Lead Wire. Lead Washers..

SASH WEIGHTS.

Highest Market Prices given for Old Lead and Lead Ashes.

CHARCOAL TIN PLATES.

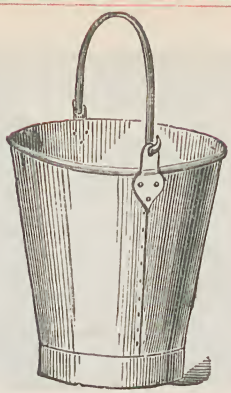
	Weight per box. cwt. qr. lb.	Best.	Wasters.	Sizes of Plates.	No. of Sheets per box.
IC	1 0 0	20/0	18/0		
IX	1 1 0	26/0	23/0		
IXX	1 1 21	32/0	29/0	14×10	225
IXXX	1 2 14	38/0	32/0	20×14	112
IXXXX	1 3 7	44/0	38/0	28×10	112
IXXXXX	2 0 0	50/0	44/0	28×20	56
IXXXXXX	2 0 21	56/0	50/0		
SDC	1 2 0	42/0	36/0		
SDX	1 2 21	48/0	42/0		
SDXX	1 3 14	54/0	48/0		
SDXXX	2 0 7	60/0	54/0	15×11	200
SDXXXX	2 1 0	66/0	60/0	22×15	100
SDXXXXX	2 1 21	72/0	66/0		
SDXXXXXX	2 2 14	78/0	72/0		
DC	0 3 14	18/0	16/0		
DX	1 0 14	24/0	21/0		
DXX	1 1 7	30/0	24/0		
DXXX	1 2 0	36/0	30/0	17×12½	100
DXXXX	1 2 21	42/0	36/0	34×12½	50
DXXXXX	1 3 14	48/0	42/0	25×17	50
DXXXXXX	2 0 7	54/0	48/0		

ANNEALED COKE TIN PLATES.

	cwt. qr. lb.	Best.	Wasters.	Size.	No. of Sheets per box.
IC	1 0 0	17/0	15/0	14×10	225
IX	1 1 0	23/0	20/0	20×14	112
IXX	1 1 21	29/0	26/0	28×10	112
DC	0 3 14	15/0	13/0	17×12½	100
DX	1 0 14	21/0	18/0		

COKE TERNE PLATES.

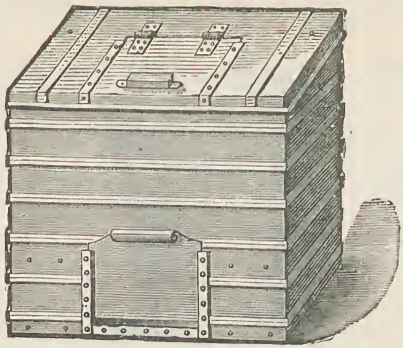
		No of Sheets per box.
IC	20×14	112
	28×20	112
	29×21	112



GALVANIZED IRON BUCKETS.

	10-in.	11-in.	12-in.	13-in.	14-in.
No. 665a.—Extra Strong, for builders and contractors, half-round bail per doz.	—	—	51/	—	—
No. 665b.—Extra Strong, for stable use, &c., with welded T iron base, round bail ... ... per doz.	—	26/	30/	33/	36/
No. 665c.—Strong, with rivetted sides and foot, round bail... ... per doz.	—	23/	25/	28/	32/
No. 665d.—Strong, with stout hoop foot, round bail ... ... per doz.	—	21/	23/	26/	29/
No. 665e.—Do., with half-round bail per doz.	12/6	14/6	16/	19/	21/
No. 665g.—Do., with grooved sides, hoop foot, half-round bail, per doz.	17/	18/	20/	23/	25/
No. 665h.—Do., with round bail ,,	14/	16/	17/	20/	22/
No. 665j.—Light, with grooved sides, hoop foot, half-round bail, per doz.	9/	10/6	12/	13/6	16/6
No. 665k.—Light seamed bucket per doz.	8/	9/	10/	11/6	—

Fire Buckets, Well Buckets, Ash Buckets, &c.



No. 665l.—Galvanized Iron Dust Bins.

Contents.	Length.	Width.	Height. Front.	Height. Back.	Each.
	ft. in.	ft. in.	ft. in.	ft. in.	
4 bushels	1 9	1 5	2 0	2 3	£1 4 0
6 ,, ...	2 4	1 8	2 0	2 3	1 13 0
8 ,, ...	2 6	1 9	2 6	2 9	1 18 0
10 ,, ...	2 10	1 11	2 6	2 9	2 5 0
12 ,, ...	3 0	2 0	2 6	2 9	2 11 0

No. 665m.—Galvanized Iron Corn Bins, rectangular, with cover, hinges, and hasp.

Contents.	Length.	Width, back to frnt.	Height.	Each.
	ft. in.	ft. in.	ft. in.	
2 bushels	1 9½	1 4½	1 6½	£0 17 0
4 ,, ...	2 0	1 7	2 0½	0 19 0
6 ,, ...	2 8½	1 9½	2 0½	1 5 0
8 ,, ...	2 9½	1 9½	2 6½	1 8 0
10 ,, ...	3 1½	1 11½	2 6½	1 13 0
12 ,, ...	3 5½	2 2½	2 6½	1 18 0
16 ,, ...	3 10½	2 4½	2 6½	2 12 0

EXTRA.

	Bushels	2	4	6	8	10	12	16
If with divisions	... each	2/6	3/0	4/0	5/0	5/6	6/0	7/0

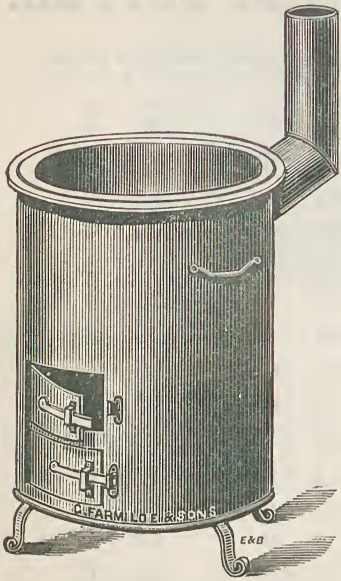
No. 665n.—Circular Pattern, with cover, hinges and hasp.

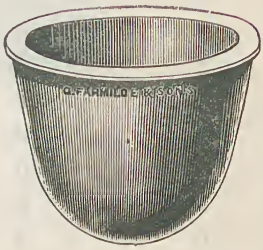
Contents	Diameter. Inches	Height. Inches.	Each.
2 bushels...	17½	24½	£0 13 0
4 ,, ...	20½	30½	0 16 0
6 ,, ...	24½	33½	1 1 0
8 ,, ...	26	35½	1 4 0

WEIGHTS OF SHEET COPPER.

Swansea wire gauge.	Weight per square foot.		Weight of common plates. 4 by 2 ft.		Weight of Scotch plates. 4 by 3 ft. 6 in.	
No.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.
1	14	0	112	0	196	0
2	13	0	104	0	182	0
3	12	0	96	0	168	0
4	11	0	88	0	154	0
5	10	3	81	0	141	12
6	9	8	76	0	133	0
7	8	8	68	0	119	0
8	7	10	61	0	106	12
9	7	0	56	0	98	0
10	6	4	50	0	87	8
11	5	8	44	0	77	0
12	5	0	40	0	70	0
13	4	8	36	0	63	0
14	4	0	32	0	56	0
15	3	8	28	0	49	0
16	3	0	24	0	42	0
17	2	12	22	0	38	8
18	2	4	18	0	31	8
19	2	0	16	0	28	0
20	1	12	14	0	24	8
21	1	8	12	0	21	0
22	1	6	11	0	19	4
23	1	3	9	8	16	10
24	1	0	8	0	14	0
25	0	14	7	0	12	4
26	0	13	6	8	11	6
27	0	11½	5	12	10	1
28	0	10	5	0	8	12
29	0	9	4	8	7	14
30	0	8	4	0	7	0

PORTABLE WASHING COPPERS.





No. 665r.—With Wrought Iron Galvanized Pans.

	6	8	10	12	14	16	18	20	25	30 galls.
Each...	24/	28/6	32/6	37/	40/	44/	48/	55/	62/	75/

No. 665s.—With Cast Iron Galvanized Pans.

	6	8	10	12	14	16	18	20	25	30 galls.
Each...	22/	26/	30/	34/	38/	42/	46/	53/	60/	70/

EXTRAS.

If mounted on wheels, 6 to 12 gallons ... ... each 13/0
14 to 20 gallons ... ... ,, 15/0

No. 665t.—Galvanized Cast Iron Pans.

6 to 20 gallons ... ... per gall. 5d.
25 to 30 gallons ... ... ,, 5¼d.
35 to 50 ,, ... ,, 6½d.
60 to 100 gallons ... ... ,, 8d.

Copper Doors, Frames, Gratings, &c.

FELT.

ROOFING FELT in rolls 30 yards long, 32 inches wide ... ... per yard 8d.

SARKING FELT in rolls 30 yards long, 32 inches wide ... ... per yard 6d.

INODOROUS FELT in rolls 30 yards long, 32 inches wide, for lining damp walls ... ... per yard 8d.

SHEATHING FELT in sheets 32-in. by 40-in.

Brown (Stockholm tar) ...per sheet	6d.
Black (refined coal tar) ... ,,	5d.

Discount %

FOUNDATION FELT for damp course, in slabs.

32 inches long by 5 inches wide ...each	1½d.
32 ,, ,, 10 ,, ... ,,	2½d.
32 ,, ,, 14 ,, ... ,,	4d.
32 ,, ,, 19 ,, ... ,,	5d.
32 ,, ,, 24 ,, ... ,,	6½d.
32 ,, ,, 27 ,, ... ,,	7½d.
32 ,, ,, 30 ,, ... ,,	8½d.

Discount %

DRY HAIR FELT for deadening sound in thin partitions and covering steam boilers, pipes, cylinders, &c. Made in sheets 34-in. by 20-in.

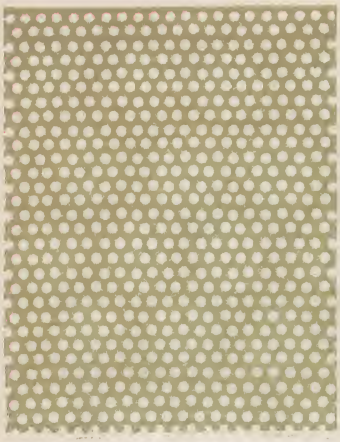
No. 0, 12-oz. ... ...per sheet	6d.
,, 1, 16-oz. ... ... ,,	7d.
,, 2, 24-oz. ... ... ,,	9d.
,, 3, 32-oz. ... ... ,,	11d.
,, 4, 40-oz. ... ... ,,	1/1
,, 5, 48-oz. ... ... ,,	1/3
,, 6, 56-oz. ... ... ,,	1/5
,, 7, 64-oz. ... ... ,,	1/7

Discount %

WEIGHTS OF WASHING COPPERS.

Inside dia. at top.	Dia. of bottom at Lag.	Depth of sides.	Contents in Gallons.	Approximate weight in pounds.
14-in.	11½-in.	11 -in.	6	7½-lbs.
15 „	12 „	12 „	7	8¾ „
16 „	13 „	12½ „	8	10 „
17 „	13½ „	13 „	9	11¼ „
18 „	14 „	14 „	10	12¾ „
19 „	15 „	15 „	12	15 „
20 „	16 „	16 „	14	17½ „
21 „	17 „	16½ „	16	20 „
22 „	18 „	17 „	18	22½ „
23 „	19 „	18 „	20	25 „
24 „	19½ „	18 „	23	29 „
25 „	20 „	20 „	26	33 „
26 „	21 „	21 „	30	37½ „
27 „	22 „	21½ „	33	41 „
28 „	23 „	22 „	37	46¼ „
29 „	24 „	22½ „	41	53¾ „
30 „	25 „	23 „	45	60 „
31 „	26 „	23 „	50	68 „
32 „	26½ „	24 „	55	78 „
33 „	27 „	24 „	60	88 „
34 „	28 „	25 „	66	98 „
35 „	29 „	26 „	72	108 „
36 „	30 „	26 „	78	117 „
37 „	31 „	27 „	86	129 „
38 „	32 „	28 „	93	139 „
39 „	33 „	28 „	100	150 „
40 „	34 „	29 „	105	157 „
41 „	35 „	30 „	111	164 „
42 „	36 „	30 „	121	181 „
43 „	37 „	31 „	132	198 „
44 „	38 „	32 „	143	214 „
45 „	39 „	33 „	156	232 „
45 „	40 „	34 „	166	249 „
47 „	40 „	35 „	177	263 „
48 „	41 „	36 „	188	278 „
49 „	42 „	36 „	197	293 „
50 „	42 „	36 „	212	318 „

PERFORATED ZINC.



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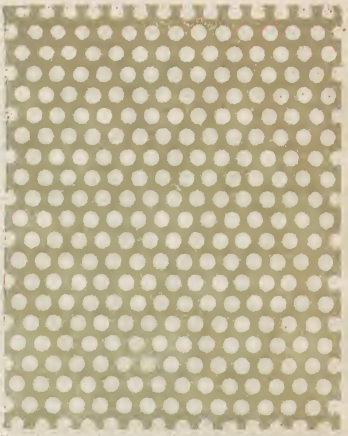

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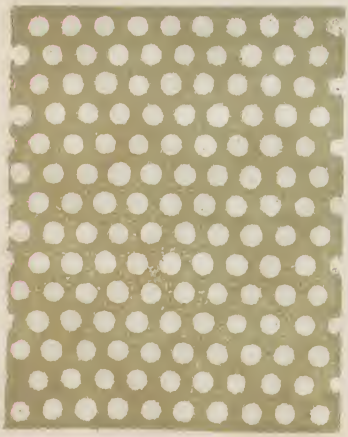


No. 9½.

No. 11.

PERFORATED ZINC.

No. 18 ½-in.

No. 15 ⅜-in.

No. 16G.

No. 18.

PERFORATED ZINC.

15a.

13a.

31.

39c.

PERFORATED ZINC.

39B.

37.

18B.

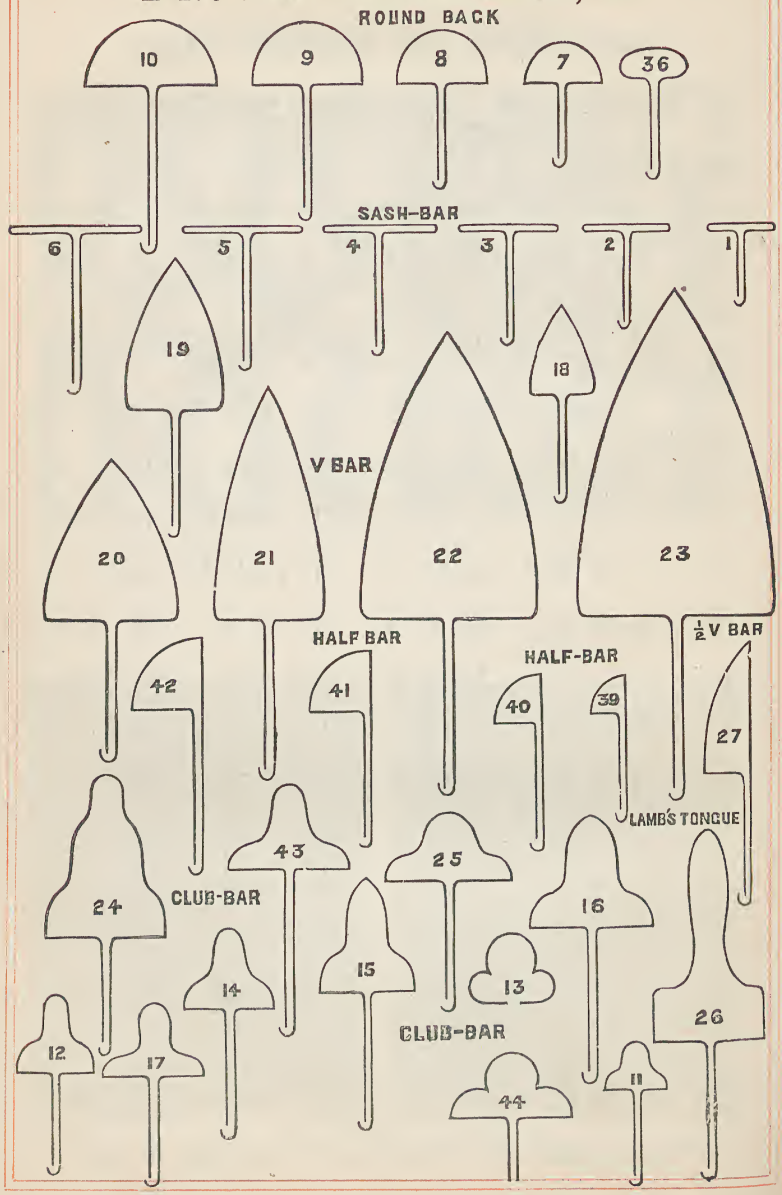
7B.

WEIGHTS OF SHEET ZINC.

Gauge.	Approximate weight per square foot. lbs. oz. drs.	Approximate weight of Sheets. 7-ft. × 2-ft. 8-in. lbs. oz. drs.	7-ft. × 3-ft. lbs. oz. drs.	8-ft. × 3-ft. lbs. oz. drs.
1	0 1 2	1 5 2	1 8 0	1 11 8
2	0 2 4	2 10 4	2 15 0	3 6 0
3	0 3 7	3 15 6	4 8 4	5 3 0
4	0 4 9	5 3 10	5 14 2	6 12 4
5	0 5 11	6 9 12	7 6 8	8 7 0
6	0 6 14	8 0 5	9 0 6	10 5 0
7	0 8 0	9 5 5	10 8 0	12 0 0
8	0 9 2	10 10 5	11 15 10	13 11 0
9	0 10 5	12 0 8	13 8 9	15 7 8
10	0 11 7	13 5 8	15 0 3	17 2 10
11	0 13 5	15 8 8	17 7 9	19 5 8
12	0 15 2	17 10 5	19 13 10	22 11 0
13	1 0 15	19 12 3	22 3 11	25 6 8
14	1 2 12	21 14 0	24 9 12	28 2 0
15	1 5 12	25 6 0	28 8 12	32 10 0
16	1 8 12	28 14 0	32 7 12	37 2 0
17	1 11 11	32 6 0	36 5 7	41 8 8
18	1 14 11	35 12 14	40 4 7	46 0 8

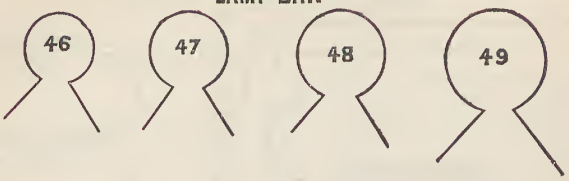
All gauges of zinc, both English and Foreign, kept in stock.

ZINC AND COPPER BARS, &c.

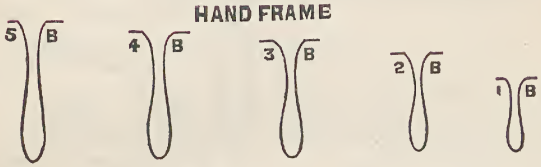


ZINC AND COPPER BARS, &c.

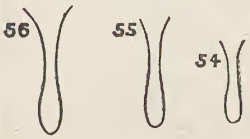
LAMP-BAR



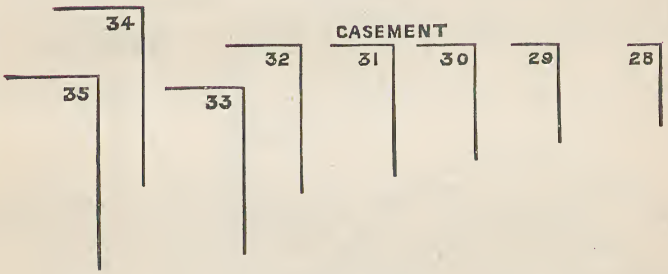
HAND FRAME



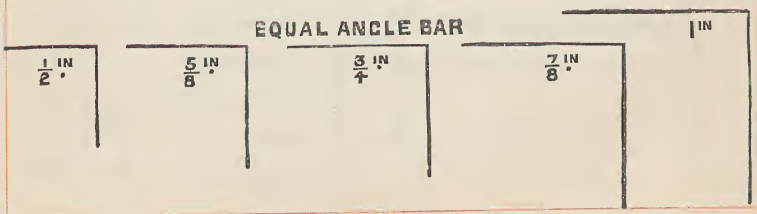
MITRE HAND FRAME

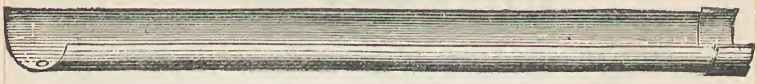


CASEMENT



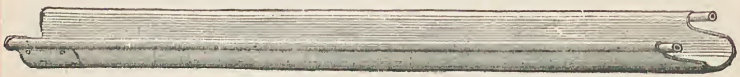
EQUAL ANGLE BAR





No. 669a.—Wrought Iron Stamped Sunk-end Gutter, half round. In 6-ft. lengths only, stamped out of "Hard" 18G iron.

	3½	4	4½	5	6-in.
Galvanized gutter per yard	9d.	10d.	11d.	1/1	1/5
,, elbows or nozzles, each	1/0	1/1	1/2	1/4	1/6
Painted gutter ... per yard	6½d.	7d.	8d.	10d.	1/0
,, elbows or nozzles, each	11d.	1/0	1/1	1/2	1/4



No. 669b.—Galvanized Tinned Wrought Iron Slip Joint Gutter.

Sizes	3	3½	4	4½	5	6-in.
Gutters ... per foot	3¾d.	4d.	4¼d.	4½d.	5½d.	6d.
Elbows ... each	1/2	1/4	1/6	1/9	2/0	2/6

No. 669c.—Galvanized Tinned Wrought Iron O. G. Gutter.

Sizes	3	3½	4	4½	5	6-in.
Gutters... ...per foot	5d.	6d.	7½d.	8d.	9½d.	11d
Elbows ..each ...	2/0	2/3	2/6	2/9	3/3	4/0

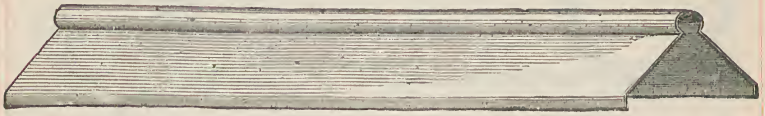
No. 669d.—Galvanized Tinned Wrought Iron Rain-Water Pipe. In 6-ft. lengths only.

	2-in.	2½-in	3-in.	4-in.
Pipes .. .. per foot	3¾d.	4½d.	5d.	6½d.
Heads ... ...each	2/9	3/0	3/4	4/0
Shoes ... ... ,,	1/3	1/4	1/5	2/3
Nails ... ... per doz.	—	—	7d.	9d.

Stayed Gutter Brackets, black ... ... per doz.	2/6
,, ,, galvanized ... ... ,,	4/0
½ by ¼ Gutter Bolts and Nuts, black ... ...per gross	2/6
,, ,, ,, galvanized ... ,,	3/0
Galvanized Spikes and Tubes, 6, 7 and 8 in. per cwt.	44/0
,, Screws and Tubes, 5, 6, and 7 in. ,,	44/0

No. 669e.—Wire Gutter Guards.

	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.
Galvnzd. Iron, doz.	4/0	5/0	6/0	7/0	8/0	9/0	10/0
Copper ... ... ,,	12/0	15/0	18/0	21/0	24/0	27/0	30/0



No. 669g.—Galvanized Tinned Wrought Iron Ridge Cap, in 6-feet lengths only.

15-in. Girth ... ... per foot	0/4½
18-in. ,, ... ,,	0/6

No. 669h.—Patent Gutter Clips.

THE ADVANTAGES OF THE GUTTER CLIPS ARE—

1st.—Their simplicity, cheapness, and durability.

2nd.—The spouting is so easily fixed at first, and can be taken down for painting or cleaning, and refixed with same clip.

3rd.—There is no danger of breaking the spout by bending the clips over.

4th.—When spout is fixed it is impossible to get out of place.

5th.—Neither the spout nor clips can straighten, even if made of zinc, or any other light material.

No. 1

Plain driving stay.

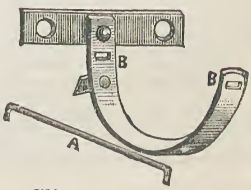
	8	9	10	11	12-in.
Per gross	10/0	11/0	12/0	13/0	14/0

No. 1.—Patent Half Round Gutter Clip, with 10-in. plain driving stay.

	3	3½	4	4½	5	6-in.
Per gross	33/0	36/0	39/0	42/0	45/0	48/0

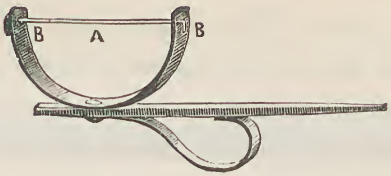
No. 2

No. 3



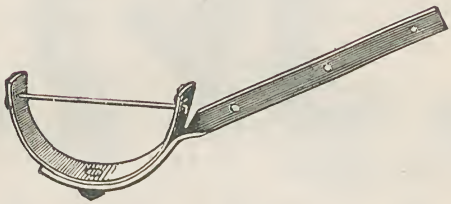
Patent Half Round Gutter Clip.

No. 2, per gross	24/0	27/0	30/0	33/0	36/0	39/0
No. 3, „	18/0	21/0	24/0	27/0	30/0	33/0



No. 4.—Patent Half Round Gutter Clip.

	3	3½	4	4½	5	6-in.
Per gross	33/0	36/0	39/0	42/0	45/0	48/0



No. 5.—Patent Half Round Gutter Clip.

	3	3½	4	4½	5	6 in.
Per gross	21/0	24/0	27/0	30/0	33/0	36/0

No. 6.—Patent Half Round Gutter Clip.

	3	3½	4	4½	5	6-in.
Per gross	28/0	31/0	34/0	37/0	42/0	45/0

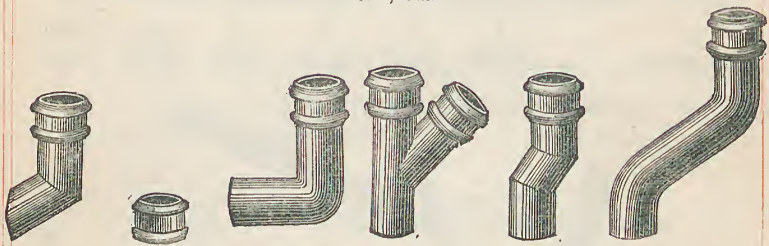
The Patent Spout Clip can be made to suit O.G. Gutter, &c. quotations given on receipt of sections.

The patent bow can be fixed to support No. 5, either riveted or detachable, with a bolt and nut, so as to allow the bow to be replenished without disturbing roof, same as No. 6.

Method of Fixing.—When the spout is in its position, pass the wire A through holes in clip B B horizontally (see No. 4), it then drops vertically, and the spout is secure.

No. 669j (late 672).—Cast Iron Rain Water Pipes, &c., Round Pipes and Connections.

No. 1, C.I.



No. 2, C.I. No 3, C.I. No. 4, C.I. No. 5, C.I. No. 6, C.I. No. 7, C.I.

	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½in.	5-in.	6-in.
No. 1 C.I. Pipes, 6ft. lengths								
per yard	9½d.	10½d.	1/0	1/3	1/6	1/10	2/2	2/9
,, ,, 2, 3 & 4ft. ,, ,,	10½d.	11½d.	1/1	1/4	1/7	2/0	2/4	2/11
No. 2 Shoes C.I. ... each	6d.	7d.	8d.	10d.	1/0	1/4	1/8	2/2
,, 15in. long ,,	1/0	1/2	1/3	1/5	1/8	2/0	—	—
,, 24in. ,, ,,	1/4	1/8	1/10	2/4	2/6	—	—	—
No 3 C.I., Union Sockets ,,	0/4	4½d.	5d.	6d.	7d.	9d.	11d.	1/1
No. 4, C.I., Elbows,								
square or obtuse ,,	10d.	11½d.	1/1	1/6	1/8	1/11	2/4	2/11
Single Branch Pcs. ,,	11¾d.	1/2¼	1/4¾	1/7	1/10	2/3	2/11	3/9
No. 5, C.I., ,, ,, ,,								
with Socket ,,	1/3	1/5½	1/11	2/1	2/4½	2/10½	3/9	4/9½
No. 6, C.I. Plinth Bends ,,	11d.	1/0	1/1	1/4	1/8	2/4	3/4	4/0
No. 7, C.I. Offsets, 2¼in.								
projection ,,	11d.	1/0	1/1	1/4	1/8	2/4	3/4	4/0
Do. do. 3-in. do. ,,	11d.	1/0	1/1	1/4	1/8	2/4	3/4	4/0
Do. do. 6-in. do. ,,	1/2	1/4	1/7	1/9	2/3	2/10	3/10	4/9
Do. do. 9-in. do. ,,	1/6	1/8	1/11	2/2	2/7	3/3	4/6	5/3
Do. do. 12-in. do. ,,	1/9	2/0	2/3	2/7	3/0	3/9	5/0	6/0
Do. do. 15-in. do. ,,	2/2	2/5	2/7	3/0	3/7	—	—	—
Do. do. 18-in. do. ,,	3/2	3/6	3/9	4/0	5/2	—	—	—
Do. do. 21-in. do. ,,	4/6	4/8	5/0	5/6	6/3	—	—	—
Do. do. 24-in. do. ,,	5/5	5/8	6/0	7/0	8/0	—	—	—

	3-in.	4-in.	5-in.	6-in.
No. 8, C.I. Heavy Rain Water or Soil Pipes...	1/2	1/9	2/7	3/2 per yd.

Ditto, Coated with Dr. Smith's Patent Solution, extra 6/0 per ton.

No. 669k (late 674).—Square and Rectangular Pipes and Connections.

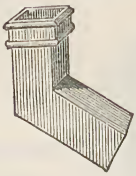
No. 9, C.I.

Size ...	3 by 2½	3 by 3	3½ by 2½	3½ by 4	3½ by 3½	4 by 2½	4 by 3-in.
No. 9, C.I.—Pipes, per yard	2/0	2/3	2/4	2/6	2/9	2/9	2/10

Size ...	4 by 4	4½ by 3½	5 by 3½	5 by 4½	6 by 4	6 by 6	9 by 5-in.
No. 9, C.I.—Pipes, per yard	3/3	3/3	3/8	4/6	5/0	6/0	11/0

No. 10, C.I.

No. 11, C.I.



No. 12, C.I.

No. 13, C.I.

Size ...	3	3½	4	4½	5	6	9-in.
No. 10, C.I.—Shoes ... ...each	1/4	1/8	2/1	2/6	2/10	4/0	
,, 11 ,, Union Sockets ,,	8d.	10d.	1/0	1/2	1/4	1/9	
,, 12 ,, Elbows, obtuse ,,	2/6	3/3	3/8	4/10	5/0	6/6	
,, 13 ,, Offsets, 3-in. projection, each	2/0	2/4	2/10	3/2	4/0	6/0	
,, 6-in. ,,	2/6	3/1	3/8	3/10	5/0	6/8	
,, 9-in. ,,	3/2	3/10	4/6	5/4	6/0	8/0	
,, 12-in. ,,	3/10	4/8	5/6	5/8	7/6	9/0	

No. 14, C.I.

No. 15, C.I.

No. 16, C I.

No. 17, C.I.

Size ...	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	6-in.
No. 14, C.I. ... ...each	1/0	1/1	1/3	1/5	1/8	1/10	2/4	2/9
,, 15 ,, ... ,,	—	—	6/3	7/10	8/9	9/6	11/0	12/0
,, 16 ,, ... ,,	—	—	—	9/0	—	—	—	—
,, 17 ,, ... ,,	—	—	13/0	14/3	15/0	—	—	—

No. 669l.—Ornamental Pipe Ears.

No. 18, C.I.

No. 19, C.I.

No. 20, C. I.

No. 21, C.I.

No. 18, C.I., No. 19, C.I., No. 20, C.I., No. 21, C.I.
2-in. to 4-in., each 1/0 ... 4½-inch to 6-in., each 1/6

No. 669m.—Patent Rain Water Pipes and Fixings.

22, C.I.

No. 23, C.I.

No. 24, C.I.

Ornamental Ears for ditto as above, but with Slot cast on, a No. 24, C.I.

	2-in. to 4-in. Each.	4½-in. to 6-in. Each.
No. 18, 19, 20 and 21, C.I.	1/1	1/6
,, 24, C.I.	0/7	1/0

No. 22, C.I. Pipes, 6-ft. lens—

	2-in.	2½-in.	3-in.	3½-in.	4-in.	4½-in.	5-in.	6-in.
Per yard	0/9½	0/10½	1/0	1/3	1/6	1/10	2/2	2/9

2-ft., 3-ft. and 4-ft. lens—

Per yard	0/10½	0/11½	1/1	1/4	1/7	2/0	2/4	2/11

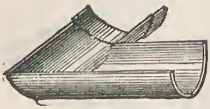
No. 23 C.I. Pipes—

	3 by 2½	3 by 3	3½ by 2½	3½ by 4	3½ by 3½	4 by 2½	4 by 4
Per yard ...	2/0	2/3	2/4	2/6	2/9	2/9	3/3

4½ by 3½	5 by 3½	5 by 4½	6 by 4	6 by 6	9 by 5 inches.
3/3	3/8	4/6	5/0	6/0	11/0

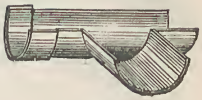
No. 670.—Cast Iron Half Round Gutters and Connections.

No. 25, C.I.



No. 26, C.I.

No. 27, C.I.

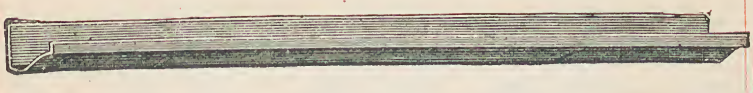


No. 28, C.I.

No. 29, C.I.

No. 30, C.I.

	3 in.	3½ in.	4 in.	4½ in.	5 in.	6 in.
No. 25, C.I.—Gutters, 6 ft. lengths, per yard	0/6	0/6½	0/7	0/8	0/9	1/0
,, ,, 2, 3, and 4 ft. lengths, per yard.	0/6¼	0/6¾	0/7½	0/8½	0/10	1/1
No. 26, C.I.—Angles, each.	0/6½	0/8	0/8½	0/9½	0/11	1/2
,, 27, C.I.—Nozzle Pieces, each.	0/6	0/7½	0/8	0/9	0/10	1/1
,, 28, C.I.—T Pieces, each.	0/7	0/9	0/10	0/11	1/1	1/4
,, 29, C.I.—Union Clips, each.	0/2	0/2½	0/3	0/3½	0/4½	0/5½
,, 30, C.I.—Stop Ends, loose, each.	0/1½	0/2	0/2	0/2½	0/3	0/4



No. 31 C.I.

No. 671.—Cast Iron O.G. Gutters and Connections.

No. 32, C.I.

No. 33, C.I.

No. 34, C.I.

No. 35, C.I.

No. 31, C.I. Gutters, 6-feet lengths, per yard

3½-in.	4-in.	4½-in.	5-in.	5½-in.	6-in.
0/9	0/9½	0/11	1/0	1/1	1/2

„ „ Gutters, with Lion Head Faucits, per yard

0/9½	0/10	0/11½	1/1	1/2	1/3

„ 32, C.I. Angles, each

0/10	0/10½	1/0	1/2	1/3	1/4

„ „ Angles with Lion Head Faucits, each

0/10½	0/11	1/0½	1/3	1/4	1/5

„ 33, C.I. Nozzles Pieces, each

0/9	0/10	0/11	1/0	1/1	1/2

„ „ Nozzle Pieces, with Lion Head Faucits, each

0/9½	0/10	0/11½	1/1	1/2	1/3

„ 34, C.I. Union Clips, each

0/3½	0/4	0/4½	0/5	0/5½	0/6

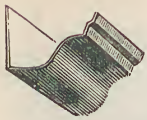
„ „ Union Clips, with Lion Head Faucits, each

0/4½	0/5	0/5½	0/6	0/6½	0/7

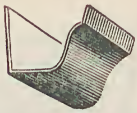
„ 35, C.I. Stop Ends, loose, each

0/2½	0/2½	0/3	0/4	0/4½	0/5

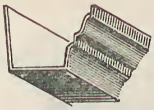
No. 671a.—Cast Iron Ornamental Gutters and Angles.



No. 36, C.I.



No. 37, C.I.



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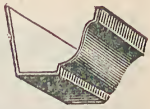
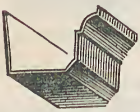
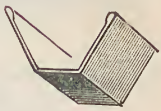


No. 39, C.I.



No. 40., C.I.

No. 41, C.I.



No. 42, C.I.

			4×2½	4½×3	5×3½	6×4
No. 36, C.I., per yard	...	...	1/1¼	1/2½	1/4¾	1/11

			4×3	4×4	4½×4	5×4	6×4	8×6
„ 37	„	„	1/5	1/10	1/11	2/0	2/4	3/9

			3½×2½	4½×3½	5×4	6×4½	6×6	7×6
„ 38	„	„	1/3	1/6	2/0	2/6	3/3	3/6

			3×2½	4×3	4½×3	5×4	5½×4	5¾×4
„ 39	„	„	1/2	1/5	1/7	2/0	2/1	2/2
			6×4	6×4½				
			2/4	2/6				

				4×3	5×2¾	5×3	6×3	6×4
„ 40	„	„	...	1/6	1/8	1/8	2/0	2/4

			4×3	5×4	5½×5	6×4	6×4½	7½×4
„ 41	„	„	1/6	1/10	2/9	2/4	2/6	3/0

Angles and Nozzles.

Square Angles charged as 1 yard of Gutter. Obtuse Angles charged as 1½ yards of Gutter.

Nozzle pieces, with drop on bottom, charged as one yard of Gutter.

	12×3½	15×5	19½×5	21×6
No. 42. C.I. Valley Gutters, per yard	3/0	4/2	5/10	7/6

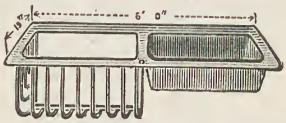
No. 671b.—Improved Cast Iron Stable Fittings.

No. 43, C.I.

No. 44, C.I.

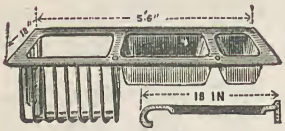
No. 43, C.I.—Stall Division.—Comprising ramp, with wrought iron bars cast in, heel post with head and sill, all fitted complete for 1½-in. wood, 9-ft. by 2-ft. 9-in., ea. £4 15 0

No. 44, C.I.—Division for Loose Box.—Comprising straight rail, with wrought iron bars cast in, heel post with head and sill, all fitted complete for 1½-in. wood, 9-ft. by 2-ft. 9-in. ... ... each 5 19 0

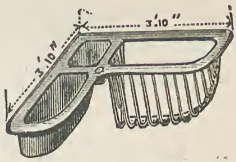


No. 45, C.I.

No. 45, C.I.—Manger Set.—Improved Manger Cover with rolled front, manger and hay rack, fitted complete, 6-ft. by 1-ft. 7-in. ... ... each 1 16 0



No. 46, C.I.



No. 47, C.I.

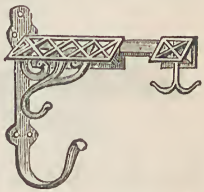
No. 46, C.I.—Do.—Improved Heavy Roll Manger Cover, fitted complete With manger, hay rack and gruel pot } 5ft. 6in. × 1ft. 6in. 1 15 0 / 6-ft. × 1-ft. 6-in. 1 19 0

No. 47, C.I.—Do.—Improved Corner Manger, for loose box, fitted complete, with hay rack, gruel pot and manger, 3-ft. 10-in. by 3-ft. 10-in ... ... each 2 7 0

No. 671b.—Improved Cast Iron Stable Fittings.

No. 48, C.I.

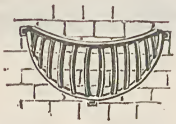
No. 49, C.I.



No. 50, C I.

No. 51, C I.

No. 52, C.I.



No. 53, C.I.

No. 54, C I.

No. 48, C.I.—Improved Manger Set for loose box, fitted complete with hay rack and manger, 3 ft. 10 in. by 2 ft. 5 in. ...	£2	2	0
No. 49, C.I.—Plain Bracket, 11 in. by 10 in., each 10d.; 12 in. by 12 in. ... ,,	0	1	0
No. 50, C.I.—Harness Bracket .. ... ,,	0	5	6
No. 51, C.I.—Improved Safety Gutter, with three channels, 6 ft. by 6 in. by 2 in., per yard	0	6	3
No. 52, C.I.—Improved Stable Gutter, with heavy cover, 6 ft. by 4½ in. by 2½ in., 5/6 per yard; 6 ft. by 7 in. by 3¼ in. ...	0	10	3
No. 53, C.I.—Hay Racks. Breast 30 in., each 6/0; 33 in., each 7/0; 36 in. each 8/0; 42 in. ... ... each	0	10	6
No. 54, C.I.—Hay Rack, Corner, 36 in., each 10/0; 42 in. ... ... each	0	15	0

No. 671c.—Hot Water Pipes and Fittings.

No. 56, C.I.

No. 55, C.I. Hot Water Pipe.

	2-in.	3-in.	4-in.	5-in.	6-in.
In 9-ft. lengths ... per yard	—	2/0	2/6	4/3	5/9
,, 6-ft. ,, ... ,,	1/4	2/0	2/6	4/6	6/0
,, 3-ft. ,, ... ,,	1/6	2/2	2/8	4/9	6/3

No. 56, C.I.

No. 56, C.I. Coil or Spigot Pipe.

	2-in.	3-in.	4-in.
In 3-ft. 6-in. to 7-ft. lengths ... per yard	1/4	—	—
,, 2-ft., 2-ft. 6-in. and 3-ft. lengths ,,	1/6	—	—
,, 6-ft. and 9-ft. lengths ... ... ,,	—	2/0	2/6

No. 57, C.I.

No. 57, C.I. Trough Pipe.

	2-in.	3-in.	4-in.
Troughs, 3-in. wide ... ... per yard	4/0	6/0	7/3
,, 6-in. ,, ... ,,	6/3	7/6	8/9
,, 9-in. ,, ... ,,	—	9/6	11/6

6-feet lengths of 3-in. and 4-in. are 6d. per yard extra.

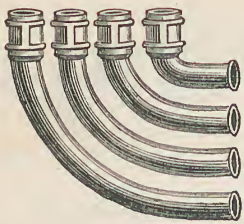


Fig. 1.
„ 2.
„ 2A.
„ 2B.

No. 57, C.I.

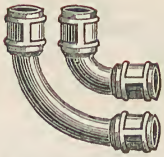
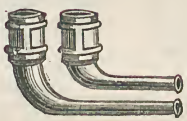


Fig. 4.
„ 4A.

No. 58, C.I.

	2 in	3 in.	4 in.	5 in.	6 in.
No. 57, C.I.—Elbows, Fig. 1, each	1/8	2/8	3/4	7/6	8/9
Long or Outside Elbow, Fig. 2 ... ... each	3/0	4/0	5/0	9/0	13/6
Long or Outside Elbow, Fig. 2A ... ... each	—	7/0	9/0	—	—
Long or Outside Elbow, Fig. 2B ... ... each	—	9/0	12/0	—	—
No. 58, C.I.—Double Socket Elbow, Fig. 4 ... each	2/0	3/0	4/0	—	—
Outside Socket Elbow, Fig. 4A ... ... each	3/3	4/3	5/3	—	—

No. 59, C.I.



No. 60, C.I.

	2 in.	3 in.	4 in.
No. 59, C.I.—Inside Bevil Elbow, 1/8 of a circle ... ... each	2/3	3/9	4/9
Outside do. do. ... ... ,,	3/6	5/3	6/3
Inside do. do. ... ... ,,	2/0	3/6	4/6
Outside do. do. ... ... ,,	2/6	4/0	5/3
No. 60, C.I.—Long or Outside Reducing Elbow ... ... each	—	4/6	6/3
Inside Reducing Elbow ... ,,	—	3/3	4/3

No. 61, C.I.

No. 62, C.I.

No. 63, C.I.

Nos. 61, C.I. to 63 C.I.—Tee Pieces, equal and reducing.

	2-in.	3-in.	4-in.	5-in.	6-in.
Each	2/6	4/0	5/0	9/6	12/6

No. 64, C.I.

No. 65, C.I.

No. 66, C.I.

		2-in.	3-in.	4-in.
No. 64, C.I.—Double Socket ...	each	1/10	3/0	4/0
,, 65 ,, Sliding Collar ...	,,	1/0	1/8	2/3
,, 66 ,, Blank Socket ...	,,	1/2	1/9	2/3

No. 68, C.I.

No. 69, C.I.

		2-in.	3-in.	4-in.
No. 67, C.I.—Blank Spigot ...	each	0/7	0/10	1/6
		3 by 2	4 by 2	4 by 3-in.
,, 68 ,, Reducing Socket	,,	3/0	4/0	4/0
,, 69 ,, Reducing Pipe ...	,,	3/0	4/0	4/0

No. 70, C.I.

No. 70, C.I.—Reducing Nipple, 3 by 2-in.... ...	each	1/10
,, ,, ,, ,, 4 by 2 or 4 by 3-in.	,,	2/6

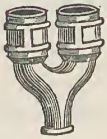
No. 71, C.I.—Close Syphon.

No. 72, C.I.—Open Syphon.

			2-in.	3-in.	4-in.
No. 71, C.I., or 72, C.I.	... ...	each	2/6	4/0	5/0

No. 73, C.I. Elbow Syphon.

No. 74, C.I. Outlet Syphon.

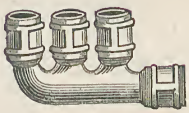


No. No. 75, C.I. Outlet Syphon.

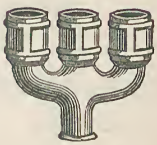
No. 76, C I. Outlet Syphon.

			2-in.	3-in.	4-in.
Nos. 73, C.I. to 76, C.I.	... ...	each	4/3	6/9	9/0

No. 77, C I.

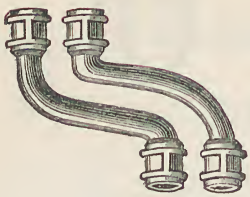


No. 79, C I.

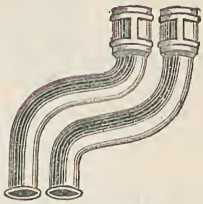


No. 81, C I.

			2-in.	3-in.	4-in.
No. 77, C.I.—3 Way Syphon	...	each	5/0	8/6	11/0
,, 78, C.I.—4 Way Syphon	...	,,	6/9	11/0	15/0
,, 79, C.I.—3 Way Elbow Syphon		,,	6/9	10/0	14/0
,, 80, C.I.—4 Way Elbow Syphon		,,	8/0	14/0	18/6
,, 81, C.I.—3 Way Outlet Syphon		,,	6/9	10/0	14/0
,, 82, C.I.—4 Way Outlet Syphon		,,	8/0	14/0	18/6

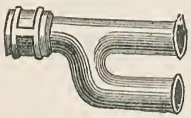


No. 83, C I.

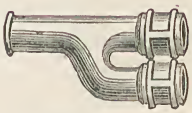


No. 84, C I.

		2-in.	3-in.	4-in.
No. 83, C.I.—Double Elbow.				
Inside	each	3/9	6/0	8/0
Outside	,,	5/0	7/9	9/0
No. 84, C.I.—Swan Necks.				
Inside	,,	3/3	5/6	7/0
Outside	,,	4/0	6/3	8/0

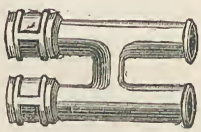


No. 85, C I.

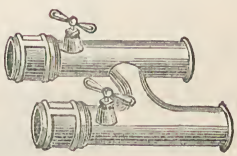


No. 86, C.I.

		2-in	3-in.	4-in.
No. 85, C.I.—Branch Pipe	each	4/3	6/9	9/0
,, 86, C.I.— ,, ,, ...	,,	4/3	6/9	9/0

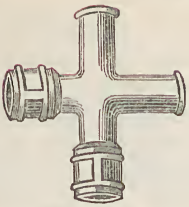


No. 87, C I.



No. 88, C I.

		2-in.	3-in.	4-in.
No 87, C.I.—H. Pipe	each	5/6	8/6	11/6
,, 88, C.I.—H. Pipe with 2 valves	,,	30/0	37/6	45/0



No. 89, C.I.

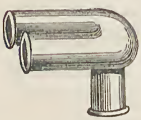
No. 90, C.I.

No. 89, C.I.—Cross Piece, with two or four sockets.

	2-in.	3-in.	4-in.
Each	4/6	7/6	10/0

No. 90, C.I.—Flange Socket Elbow.

Each	3/6	4/9	6/3



No. 91, C.I.

No. 93, C.I.

No. 94, C.I.

No. 91, C.I.—Two-way Coil Syphon.

2-inch ... ...each 4/0

No. 92, C.I.—Three-way Coil Syphon.

2-inch ... ... ,, 5/0

		2-in.	3-in.	4-in.
No. 93, C.I.—Flange Spigot	...each	2/6	3/9	4/9
,, 94 ,, ,, Socket	... ,,	2/6	4/0	5/3

No. 95, C.I.

No. 96, C.I.

No. 95, C.I.—Throttle Valve.

	2-in.	3-in.	4-in.	5-in.	6-in.
Each ...	11/6	13/6	15/6	25/0	35/0

No. 96, C.I.—Diaphragm Screw Valve.

	2-in.	3-in.	4-in.
Each	16/0	20/0	25/0

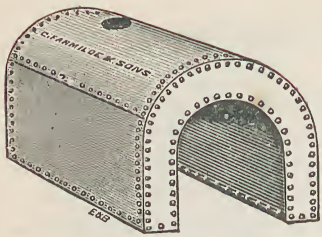
BOILERS.

One of the most important parts of a hot-water apparatus is the boiler. It is therefore necessary to select a boiler which will give the best results both in first cost as well as in economy of fuel and future maintenance. There are a very large number of boilers now before the public, each claiming some particular merit, and each having their respective advocates. As the result of many years experience it is considered that, on the whole, a wrought-iron boiler of the saddle type is the one which combines the greatest number of advantages. Cast-iron should be only used in small boilers, in many respects it is a better material for resisting the action of the water than wrought-iron, which will constantly scale, so that a boiler will ultimately become so thin as to be uselesss; but on the other hand, in complicated castings, such as some boilers are made up from, it is impossible to be sure that the metal is of equal thickness in all parts, and when this is not the case, strains are set up which may result in the ultimate destruction of the boiler. Cases have been known where a cast boiler has failed directly the fire was lighted, although no defect could be seen; though in other cases the same boiler might last for years before it failed.

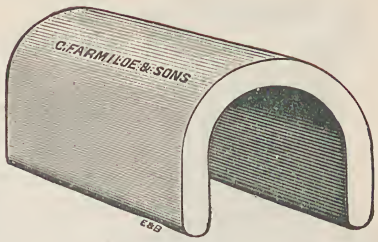
A few words in explanation are necessary regarding the heating power of boilers. The power of all boilers is calculated upon Hood's data, viz :—one square foot of direct heating surface is equal to 50 feet of 4-in. pipe. This is the usual way in which all wrought boilers are calculated, but it is somewhat misleading as a boiler will only work up to its full power under the most favourable conditions, good fuel, frequent stoking, and good draft. As a safe rule, no boiler should be put to heat more than two-thirds of its estimated power, and if this is attended to there will be no cause of complaint.

Saddle boilers when set in brickwork will burn coal or coke, but upright boilers should be supplied with coke or anthracite coal broken small. Independent boilers will not burn coal, but must have coke or cinders. All flues should be frequently swept out, and the ash-pit kept clear of dust. By this means the boiler will be more durable in wear, and less fuel will suffice.

(Messenger's & Co.'s Catalogue.)



No. 97, C.I.



No. 98, C.I.

No. 97, C.I.—Wrought Iron Riveted Saddle Boiler.

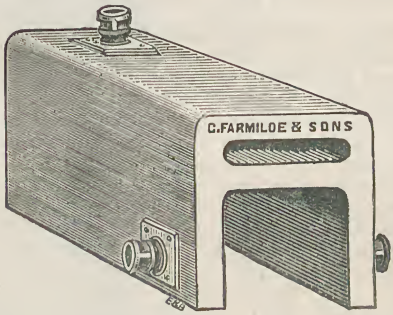
Size	18-in.	21-in.	24-in.	30-in.	36-in.
Average weight	2-cwt.	2¼-cwt.	2½-cwt.	3-cwt.	3½-cwt.
Per cwt. ...	50/0	50/0	46/0	46/0	46/0

42-in.	48-in.	54-in.	60-in.
4½-cwt.	5¼-cwt.	6-cwt.	6¾-cwt.
46/0	46/0	46/0	46/0

No. 98, C.I. Wrought Iron Welded Saddle Boiler.

Size...	18-in.	21-in.	24-in.	30-in.	36-in.
Each ...	47/6	55/0	67/6	97/6	107/6

42-in.	48-in.	54-in.	60-in.
127/6	180/0	240/0	285/0



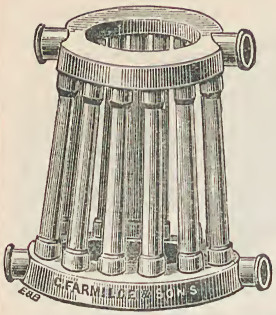
Saddle Welded Boiler with one Flue and terminal end.

No. 99, C.I., with one flue, each—

Size 24-in.	30-in.	36-in.	42-in.	48-in.	54-in.	60-in.
210/0	280/0	330/0	375/0	475/0	590/0	670/0

No. 100, C.I., with two flues, each—

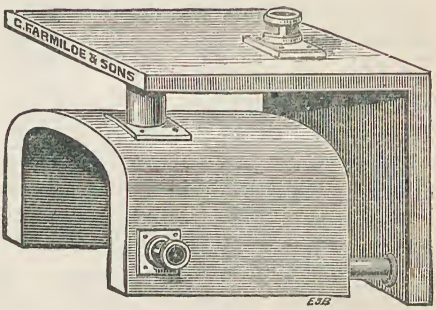
300/0	360/0	430/0	580/0	700/0	840/0	920/0



No. 101, C.I.

No. 101, C.I.—Cast Iron Tubular Boiler

			Flue Tops and Lids for ditto.
Avrg. hgt.,	21 by 17½in. dia..	66/0	7/6 each.
,,	23 by 20-in. ,,	92/0	10/0 ,,
,,	27 by 22-in. ,,	115/0	12/0 ,,
,,	30 by 27-in. ,,	132/6	15/0 ,,
,,	36 by 35-in. ,,	287/6	20/0 ,,

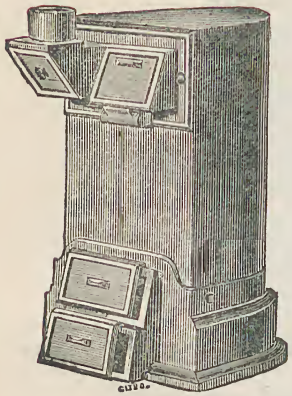


No. 102, C.I.—Jones's Patent "Double ⌊ " Saddle Boiler.

These boilers possess all the advantages of the old saddle boilers, with the following improvements, viz.:—the water space at back and over the top of the saddle increases the heating service to such an extent that a Patent "Double ⌊ " Saddle Boiler will do about twice the amount of work with the same quantity of fuel; the cost of setting is also considerably reduced, and likewise the space occupied; at the same time these boilers are simple in construction, and being made of wrought-iron are not liable to crack. They are made of the following sizes:—

Sizes. Long.	Wide.	High.	To heat of 4-in. pipe.	£	s.	d.
18-in	18-in. ...	20-in.	300-ft.	7	0	0
24 ,, ...	18 ,, ...	20 ,, ...	400 ,, ...	8	0	0
30 ,, ...	18 ,, ...	20 ,, ...	500 ,, ...	9	0	0
24 ,, ...	24 ,, ...	24 ,, ...	700 ,, ...	12	0	0
30 ,, ...	24 ,, ...	24 ,, ...	850 ,, ...	14	0	0
36 ,, ...	24 ,, ...	24 ,, ...	1,000 ,, ...	16	0	0
48 ,, ...	24 ,, ...	24 ,, ...	1,400 ,, ...	20	0	0
60 ,, ...	28 ,, ...	28 ,, ...	1,800 ,, ...	25	0	0
72 ,, ...	30 ,, ...	30 ,, ...	2,600 ,, ...	35	0	0
96 ,, ...	36 ,, ...	36 ,, ...	4,500 ,, ...	50	0	0
108 ,, ...	48 ,, ...	48 ,, ...	7,000 ,, ...	75	0	0
144 ,, ...	48 ...	48 ,, ...	10,000 ,, ...	100	0	0

Prices exclusive of Outlets.



No. 103, C.I.—Greenhouse Boiler.

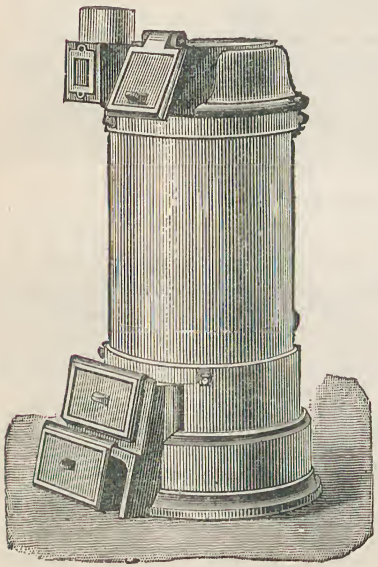
This boiler is made with a waterway top, and is also carried to the level of the grate bars, so that the fire being entirely surrounded by a waterway, it can be fixed either in a brick or wood foundation of greenhouse.

The smoke flue can be put at right or left hand side as required.

Size of boiler, exclusive of stand. High. in.	W. in.	D. in.	Size of sockets. in.	Estd. Htg: in 2-in. pipe. ft.	£	s.	d.
15 by	14 by	14	1½	350	3	15	0
18 ,,	14 ,,	14	1½	400	4	10	0
21 ,,	14 ,,	14	1½	500	5	0	0
24 ,,	14 ,,	14	2	550	5	10	0
27 ,,	14 ,,	14	2	600	6	0	0
30 ,,	14 ,,	14	2	650	6	10	0
24 ,,	16 ,,	16	2	700	7	5	0
30 ,,	16 ,,	16	2	850	8	10	0
36 ,,	16 ,,	16	2	1000	10	0	0
42 ,,	16 ,,	16	2	1200	11	10	0

The sockets, unless specially ordered, are fitted at back of boiler.

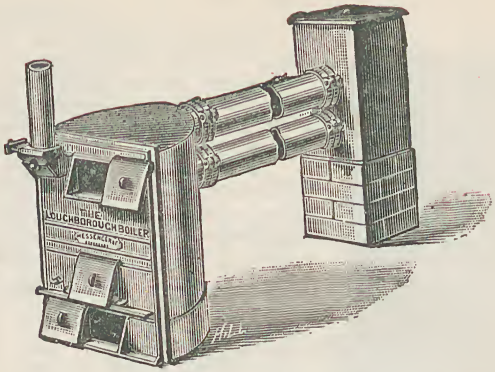
Prices of larger boilers on application.



No. 104, C.I.—Greenhouse Boiler.

Outside size. H. in.	Dia. in.	Size of sockets. in.	Estd. htng. in 2-in. pipe. ft.	£	s.	d.
28 ,,	14	1½	250	3	2	6
32 ,,	14	1½	300	3	7	6
36 ,,	14	1½	350	4	2	6
36 ,,	16	2	500	5	0	0
39 ,,	16	2	600	5	15	0
42 ,,	16	2	650	6	10	0

The sockets, unless specially ordered, are fitted at the back of boiler.



No. 105, C.I.—The Loughborough Boiler. For small Greenhouses.

No.	Size of Boiler. Height.	Width.	Depth.	Heating power of 2-in pipe or half the amount of 4-in.	
1.	25 inches.	13 inches.	13 inches.	... 100 feet.	... £2 12 0
2.	25 ,,	17 ,,	13 ,,	... 200 ,,	... 4 0 0
3.	25 ,,	19½ ,,	17½ ,,	... 400 ,,	... 5 10 0
4.	25 ,,	19½ ,,	21 ,,	... 550 ,,	... 7 5 0
5	28 ,,	19½ ,,	21 ,,	... 750 ,,	... 8 10 0
6.	28 ,,	19½ ,,	25½ ,,	... 1000 ,,	... 10 0 0

These prices include sockets for either 2-in., 3-in., or 4-in. pipe cast on Boilers, Nos. 1, 2, and 3. The larger ones, Nos 4, 5, and 6, are of wrought iron, and the sockets are therefore bolted on, and in this case are charged extra; 2-in., 4/6; 3-in, 5/6; 4-in, 6/6 each. The smoke flue in Nos. 1, 2, 3, and 4 can be either on right or left hand of front, or in Nos 1, 2, and 3 on top; in Nos. 5 and 6 it is in centre of front. *In ordering, the size of sockets required and their position should be stated.*

No. 106, C.I —Heating Apparatus complete.

An apparatus consisting of boiler, two 6-ft. lengths of 4-in. pipe, feed Syphon, and elastic joints £4 4 0

Cost of complete apparatus for houses of the following dimensions—

Lngth.	Wdth.	Cost for lean-to house.	Cost for span house.	Lngth.	Width	Cost for lean-to house.	Cost for span house.
10 ft. by	5 ft.	£4 12 0	—	16 ft. by	10 ft.	£6 13 0	£5 18 0
12 ,,	8 ,,	5 0 0	£5 0 0	20 ,,	10 ,,	7 10 0	7 12 0
16 ,,	8 ,,	5 10 0	5 10 0	16 ,,	12 ,,	7 13 0	8 3 6
20 ,,	8 ,,	6 6 0	5 18 0	12 ,,	12 ,,	6 15 0	6 8 0
12 ,,	10 ,,	6 0 0	6 8 0				

4-in. piping is included in the above prices (except for the 10 0 by 5.0 greenhouse which has 26-ft. lengths of 3-in. pipe), arranged in some cases along one side, in others along one side and end, and in others along each side and end.

These prices include boiler and fittings, stove pipe and damper, hot-water pipes, with elastic joints, and open-feed syphon. Set of stoking tools, 5/0. Cap to stove-pipe, if required, 1/6 each. Brass draw-off tap for boiler, if required, 6/6 each. Pipe rests, 9d. each

TOOLS.

No. 675a.—The Patent Automatic Plumber's Furnace.

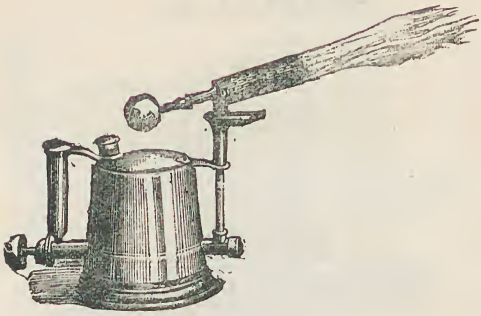
This apparatus is constructed to burn benzoline, and is adapted for heating soldering irons and melting solder.

The reservior holds ½-gallon benzoline, and is fitted with a small pump by means of which a pressure of cold air is obtained. This pressure forces the spirit to the burner, and gas is immediately generated, a flame or blast is produced, which can be made large or small at the will of the user, as the whole is under perfect control.

This furnace will melt 10-lbs. solder in 9 minutes, and will heat a pair of irons in 12 minutes.

Weight of furnace when filled 15-lbs.

	Net prices.
Each	37/6
Solder pot for do. ... ...each	1/0



The Patent Automatic Torch, for burning off paint, soldering, brazing, tempering, pipe thawing, &c.

This apparatus is constructed to burn benzoline, the cost of which is about 80 per cent less than that of methylated spirit. A small pump fitted in the reservior enables the user to apply a pressure of cold air to the benzoline, forcing it in a fine stream or jet to the burner, a flame or blast is produced which is under perfect control and which can be regulated with the greatest ease.

The spirit is kept quite cold, and the apparatus can be used with perfect safety, in any position, bottom up or otherwise, and in the strongest winds.

The reservoir holds 1½ pints, and the torch will burn for three hours at full blast without refilling, at the cost of 2½d.

The Patent Automatic Torches are strongly made in annealed brass, and each one is carefully tested prior to being sent out; full instructions sent with each apparatus.

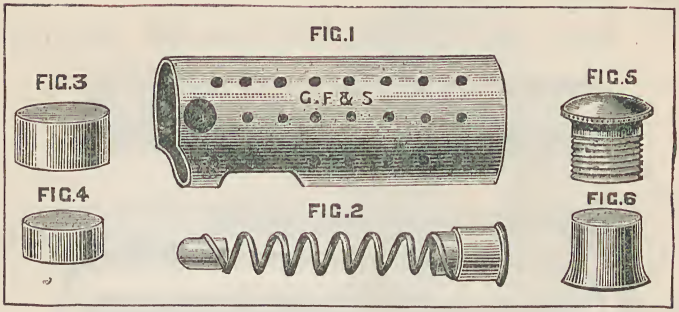
No. 675b.—With burner for burning off paint.

Net prices.

Each 27/6

No. 675c.—Do. for soldering, lead burning, or brazing.

Each 27/6



675d.—Fittings for the Patent Automatic Torch and Furnace.

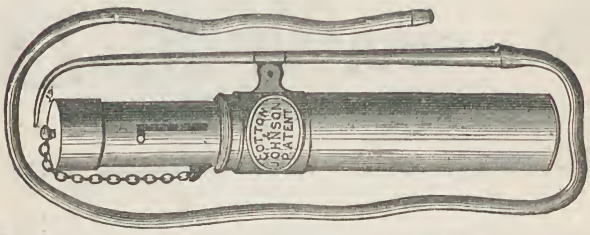
	Net prices.
Fig. 1.—Perforated brass shield	each 1/6
„ 2.—Spring valve and washer	„ 0/8
„ 3.—Brass cap for valve chamber	„ 0/5
„ 4.—Composition washer for valve chamber ...	„ 0/2
„ 5.—Brass feeder caps	„ 0/9
„ 6.—India-rubber plug for feeder cap ...	„ 0/2
Cup leathers for air pump	„ 0/2
Burner with needle valve, brass shield, and iron standard pipe complete	„ 14/0
Iron standard pipe filled with prepared wick packing	„ 0/9

G. Farmiloe & Sons are prepared to execute all orders for repairs promptly and cheaply, but ordinary wear and tear can easily be made good by means of the above fittings, which are made by special machinery to a standard gauge.

No. 676.—Blow Pipes.

Each 9-in. 0/7 10-in. 0/8 11-in. 0/9 12-in. 0/10

No. 677.



No. 678.

No. 677.—Spirit Flame or Torch.

Each, No. 1, 2/3 No. 2, 2/6 No. 3, 2/9 No. 1, Bent, 2/9

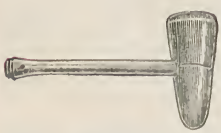
No. 1 is more particularly adapted as a lamp lighter; Nos. 2 and 3 for soldering pursoses.

Sockets to fit No. 1 to attach to long sticks for lighting purposes, 3d. each.

No. 678.—Spirit Flame or Torch, with Blow Pipe attached.

The combination of torch and blow pipe is particularly adapted for making joints in situations difficult and dangerous to approach by the ordinary blow pipe and rushes. It is supplied with 2-ft. of flexible India-rubber tube and mouth-piece, and is jointed on to the sliding band. By these two motions the workman is enabled by the use of one hand to give the flame any direction or intensity that he may require.

No. 2. Capable of soldering tubes to 1-in. diameter, each 6/0
„ 3. „ „ „ above „ 6/6

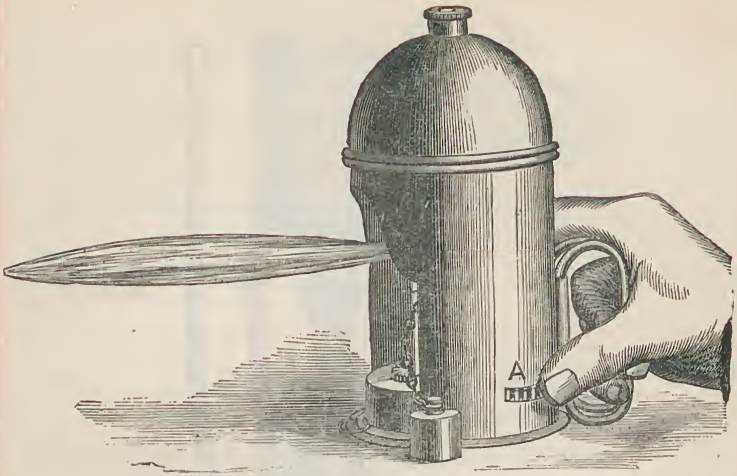


No. 679.—Bossing Mallets.

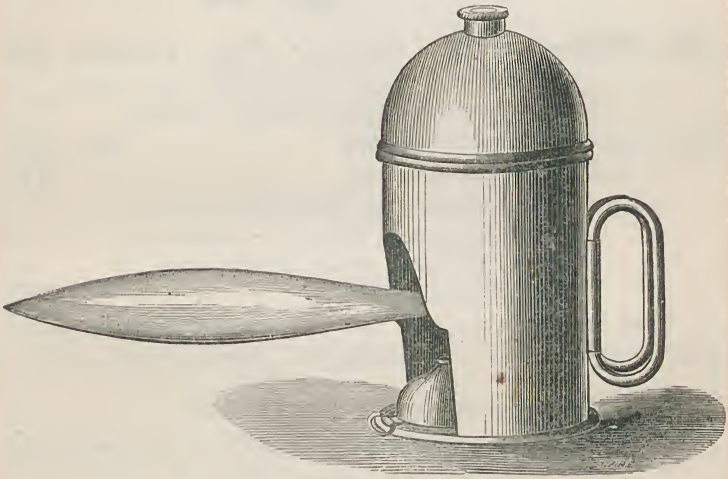
Each ... 2½-in. 1/9 3-in. 2/0 3½-in. 2/6

No. 679a.—Bossing Sticks.

Each 1/6



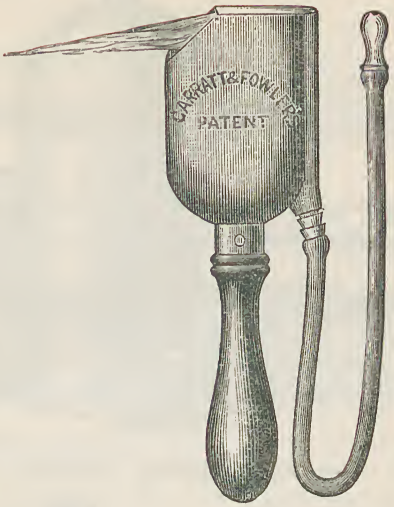
No. 681.—Regulating Blowing Apparatus, each 10/0



No. 682.—Blowing Apparatus.

Nos.	1	2	3	4	5
Each	4/0	5/0	6/0	8/0	12/0
Extra boilers ,,	1/6	2/0	2/6	3/0	4/0

When ordering either of the above, please state whether for soldering, or burning off.



No. 684.—Garratt & Fowler's Patent Plumbers', Gas Fitters', and Painters' Lamps.

With flexible tube and mouth-piece, complete.

No. 1.	Suitable for plumbers' use ... . each	5/0
„ 2.	Suitable for gas fitters' use ... ... „	4/0
„ 3.	Suitable for plumbers, gas fitters, and painters, with regulating screw, by means of which the flame can be altered from a fine point to a broad flame ... ... „	6/0

These lamps are made of cast brass, and filled with cotton waste, saturated with methylated spirit or benzoline.

No. 684A.—Hulme's Patent Paint Remover.

With two scrapers, chisel knife, and screw key, each 12/0

Printed Instructions sent with each.

The Paint Remover is a small fire-grate, light and handy, with two handles at the back, a sliding lid on the top, and a scraper attached to the top bar in front. Wood Charcoal is burned in the grate; the fire softens the paint, and, at the same time, heats the scraper; the hot scraper is then applied to the softened paint, which can be scraped of with ease.

BRUSHES, &c.

No. 685.—Ground Brushes, String Bound.

No.	8-0	6-0	4-0	3-0	2-0	1-0
Grey centre ... ... per doz.	48/0	42/0	38/0	34/0	26/0	23/0

All Lily.

No.	8-0	6-0	4-0	3-0
Per doz.	52/0	46/0	42/0	38/0

All Grey or Black, 2/0 per doz. less than Grey Centre.

No. 686.—Watkin's Patent Ground Brushes.

Round.

Grey or Black, per doz.

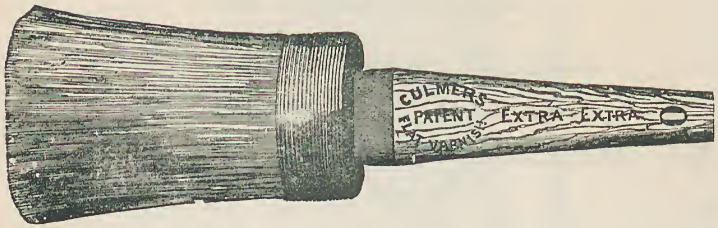
No.	8-0	6-0	4-0	3-0	2-0	1-0	1	2	3	4
	50/0	43/0	40/0	36/0	28/0	25/0	20/0	17/0	14/0	12/6

No.	8-0	6-0	4-0	3-0	2-0	1-0
Lily	60/0	51/0	46/0	42/0	32/0	28/0

Oval ditto, 1/0 per doz.

No. 687.—Copper Bound Oval One Knot Ground Brushes.—(Hamilton's.)

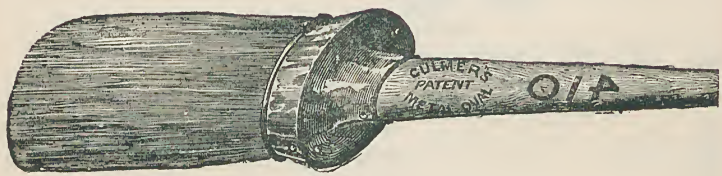
	5½-in. 8 0	6 0×	5-in. Bristles. 6 0	4 0	3 0
Lily Bristles ... ... per doz.	61/0	—	52/0	47/0	43/0
Yellow Middles ... ... ,,	54/0	—	46/0	42/0	39/0
Black Bristles .. .. ,,	51/0	—	44/0	41/0	37/0
Grey Middles ... ... ,,	51/0	47/0	44/0	41/0	37/0
,, 6-in. Bristles... ,,	68/0	—	64/0	59/0	—



No. 688.—Patent FLAT Paint Brushes.

	8-0	7-0	6-0	4-0	3-0
Per doz.	56/0	50/0	46/0	42/0	36/0

2-0	1-0	1	2	3	4
32/0	27/0	24/0	18/0	15/0	12/0



No. 689.—Patent OVAL Metal-Bound Ground Brushes.

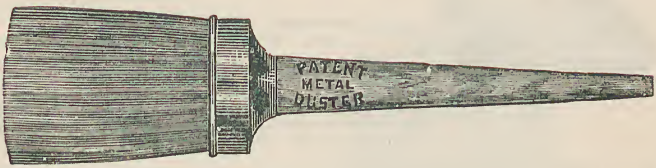
	8-0	6-0	4-0	3-0	2-0	1-0	1
Grey Centre, per doz.	52/0	46/0	42/0	38/0	32/0	30/0	28/0
Lily, or all Yellow ... ,,	54/0	48/0	44/0	40/0	36/0	34/0	30/0

Bridled, ready for use, 2/0 per doz. extra.

No. 690.—Patent ROUND Metal Bound Ground Brushes.

	8 0	6-0	4-0	3-0	2-0	1-0	1
Grey Centre, per doz.	50/0	43/0	40/0	36/0	28/0	25/0	20/0
Lily, or all Yellow ... ,,	52/0	46/0	42/0	38/0	32/0	28/0	24/0

Bridled, ready for use, 2/0 per doz. extra.



No. 691.—Patent Metal Bound Dusters.

LONG, 7-in. Hair.

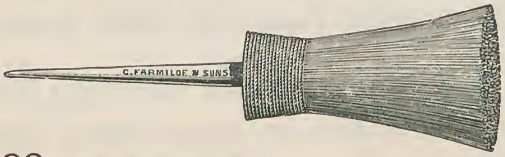
No.	8-0	6-0	4-0
Per doz.	52/0	48/0	44/0

MEDIUM, 6½-in. Hair.

No	8-0	6-0	4-0
Per doz.	50/0	46/0	42/0

SHORT.

No.	4-0	3-0	2-0	1-0	1	2	3	4
Per doz.	38/0	34/0	30/0	25/0	23/0	18/0	15/0	12/0

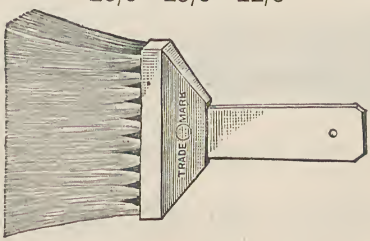


No. 692.—Dusters, String Bound.

No.	8-0	6-0	4-0	3-0
Per doz.	53/0	48/0	44/0	34/0

No. 693.—Watkins' Patent Dusters.

	7-in.			6½-in.	6-in.				
	8	6	4	4×	4	3	2	1	
	0	0	0	0	0	0	0	0	1
Per doz.	58/0	54/0	48/0	43/0	38/0	35/0	28/0	26/0	22/0
			2	3	4				
			20/0	15/0	12/0				



No. 693a.—Glazier's Square Set Dusters.

Best, 1/6 each. Seconds, 1/1 each.

No. 695.—Watkins' Patent Oval Bevelled Varnish Brushes

	6-0	4-0	3-0	2-0	1-0	1	2	3	4	5
Per doz.	52/	48/	44/	36/	32/	30/	28/	26/	24/	22/

These brushes are made of shorter and stiffer hair than the ordinary brushes, and are bevelled on each side to a sharp edge, like a worn brush; they are not cut, but are wrought into this shape, so that the soft termination of the bristle is preserved.

The smaller sizes are particularly adapted for coach builders.

No. 696.—Culmer's Patent Flat Varnish Brushes.

	6-0	4-0	3-0	2-0	1-0	1	2	3
Per doz.	54/0	46/0	40/0	36/0	32/0	28/0	22/0	18/0

Manufactured of the finest selected bristles specially for varnish work.

Brushes which are made specially for varnish should not be used as dusters, nor put into water, as the cement is injured thereby.

No. 697.—Culmer's Patent Flat Chiselled Edge Brushes.

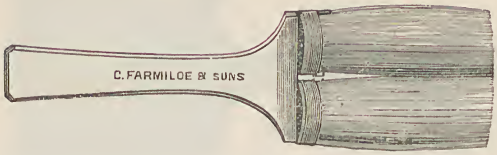
All grey or all black.

	8/0	6/0	4/0	3/0	2/0
Per doz. ...	46/0	40/0	36/0	28/0	24/0

No. 697a.—Iron Bound Varnish Brushes.

Nos.	1	2	3	4	5	6
Per doz. ...	2/9	4/0	5/0	6/6	7/6	9/0

Nos.	7	8	9	10	11	12
Per doz.	12/6	16/0	21/6	24/6	30/0	40/0



No. 698.—Ground Distemper Brushes, 2-Knot, Copper Wire Bound.

	12-oz.	11-oz.	10-oz.	9-oz.
Per doz.	100/	90/	80/	70/

Unground 2/ per doz. less.

No. 699.—Watkins' Patent 2-Knot Copper Bound Ground Distemper Brushes. Per doz.

	6-in. Bristles.					5½-in. Bristles.		
	12-oz.	11-oz.	10-oz.	9-oz.	8-oz.	8-oz.	7-oz.	6-oz
Grey	112/	104/	96/	87/	78/	68/	61/	53/
Black	109/	101/	93/	85/	76/	65/	59/	50/
Yellow	112/	104/	96/	87/	78/	—	—	—

Unground ... ... 2/ per doz. less.
String bound ... ... 3/ ,, ,,

No. 699a.—Hamilton & Co.'s 1884 Patent Copper Band Distemper Brushes.

	12-oz.	11-oz.	10-oz.	9-oz.	8-oz.
6-in Bristles ... ... per doz.	112/	104/	96/	87/	78/

No. 700.—Copper Bound 2-Knot Mixture Distemper. For washing down.

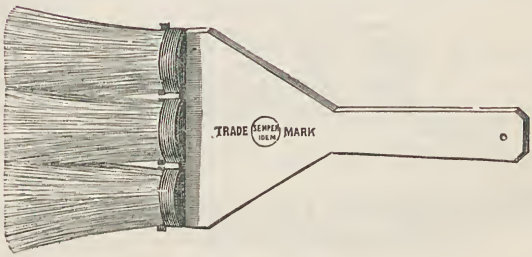
Per doz. 30/

No. 701.—Copper Bound Fibre Distemper. For lime.

	×××	××	×	1	2	3
Per doz.	13/	12/	11/	10/	9/	8/

No. 702.—Distemper Brushes, CULMER'S Patent Copper Band, ground.

			××	×××
Grey centre	...	... per doz.	84/0	90/0



No. 703.—3-Knot Stock or Plasterers' Brushes.-(HAMILTON'S.)

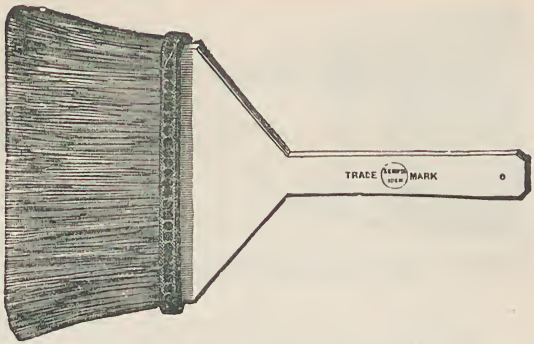
Per dozen—

	9-oz.	8-oz.	7-oz.	6-oz.	5-oz.	4-oz.	3-oz.	2-oz.	1-oz.
String-bound	76/	68/	60/	48/	34/	27/	18/	11/	7/
Copper bound	78/	70/	62/	48/	33/	27/	19/	12/	8/

No. 704.—4-Knot Scotch Stock Brushes.—(HAMILTON'S.)

Per dozen—

	9-oz.	8-oz.	7-oz.	6-oz.	5-oz.	4-oz.	3-oz.	2-oz.	1-oz.
String-bound	76/	68/	60/	48/	34/	27/	18/	11/	7/
Copper bound	78/	70/	62/	48/	33/	27/	19/	12/	8/



No. 705.—Nailed Stock Brushes.—(Hamilton's.)

	9-oz.	8-oz.	7-oz.	6-oz.	5-oz.	4-oz.	3-oz.	2-oz.	1-oz.
Per doz.	78/0	70/0	62/0	54/0	41/0	28/0	18/0	11/0	7/0

No. 706.—Nailed Stock Brushes. Extra Stiff bristles. (Hamilton's.)

	6-in. black bristles.			5½-in. black bristles		
	8-oz.	7½-oz.	7-oz.	8-oz.	7½-oz.	7-oz.
Per doz.	89/0	84/0	78/0	74/0	70/0	65/0

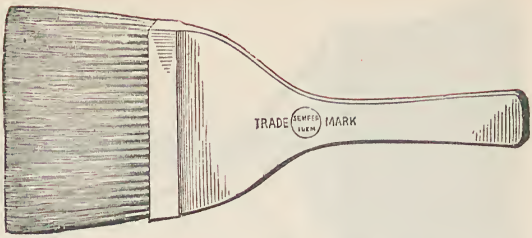
No. 707.—Limer Brushes (Hamilton's) Stiff White Bristles.

	10-oz.	9-oz.	8-oz.	7-oz.
Per doz	98/0	88/0	78/0	68/0

No. 708.—Limer Brushes (Hamilton's) Grey or Black Bristles.

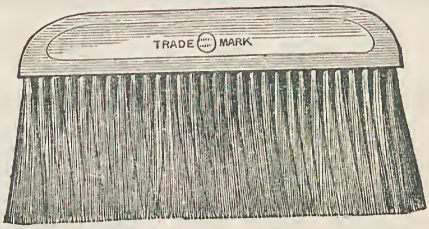
	10-oz.	9-oz.	8-oz.	7-oz.	6-oz.	5-oz.	4-oz.	3-oz.	2-oz.	1-oz.
Per doz.	84/0	75/0	67/0	60/0	38/0	31/0	26/0	16/0	12/0	8/0

3 rows 1/0 per doz. extra.



No. 709.—Paper Hanger's Brushes (long).

No. 1 ... ... per doz.	56/0
,, 2, extra full ... ... ,,	70/0

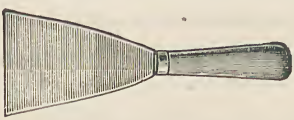


No. 710.—Paper Hanger's Brushes (short).

	7-in.	8-in.	9-in.	10-in.	12-in.
Per doz. ...	33/0	39/0	43/0	49/0	58/0

No. 711.—Paper Hanger's Scissors.

	9-in.	10-in.	11-in.	12-in.
Per pair	2/8	2/11	3/5	4/2



No. 712.—Paper Hanger's Knives.

Each ... 3-in. wide, 1/4 4-in. wide, 1/9

No. 713.—Sash Tools.

	0	1	2	3	4	5	6	7	8	9	10	12
Per doz.	2/	2/6	3/	4/	5/	6/	7/6	10/	12/	15/	18/	22/

Socket Sash Tools same price.

No. 714.—Hamilton's Sash Tools. Lily hair.

	0	1	2	3	4	5	6	7	8	9	10	12	14	16
Per doz.	2/	2/6	3/	4/	5/	7/	9/	12/	15/	18/	23/	29/	42/	50/

No. 715.—Hamilton's Socket Sash Tools.

	3	4	5	6	7	8	9	10	1
Per doz.	4/0	4/6	6/0	8/0	10/0	13/0	16/0	21/0	26/0

No. 716.—Hamilton's Sash Cutting Tools, in tin.

Per doz. ½-in. 10/0 ¾-in. 13/0 1-in. 16/0

No. 717.—Foreign Sash Tools.

Bound with red string. White hair.

	1	2	3	4	5	6	7	8	9	10	11
Per doz.	9d.	1/0	1/3	1/9	2/2	2/9	3/3	4/0	4/6	5/6	6/3

	12	13	14	15	16	17	18	19	20
Per doz.	7/3	8/9	10/3	12/6	14/6	17/0	20/0	23/0	27/0

No. 718.—Hamilton's Improved Varnish Tools.

Per doz.—

No.	3	4	5	6	7	8	9	10	12
	4/0	5/0	6/0	8/0	9/0	12/0	15/0	20/0	26/0

These are made of stiff bristles, set in socket handles.
They must not be used in water.

No. 719.—Round Camel Hair Tools. In Tin.

Nos.	1	2	3	4	5	6	7	8	9	10
Per doz.	4/6	5/	6/	6/6	8/	9/	10/	11/	12/6	14/6

Nos.	11	12	13	14	15	16	17	18	19	20
Per doz.	16/	17/	23/	25/	27/6	29/6	32/	44/	52/	56/

These Tools are made specially for various light varnishes,
and for Lacquer.

No. 720.—Round Hog Hair Tools. In Tin.

Per doz.—

1	2	3	4	5	6	7	8	9	10	11	12
2/0	2/0	2/3	2/3	2/6	2/6	3/6	4/0	4/6	5/0	5/6	6/0

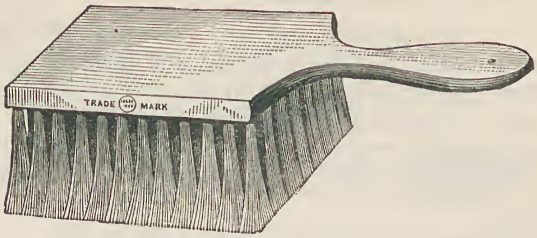
13	14	15	16	17	18	19	20	21	22	23	24	25
8/0	9/0	10/	11/	13/	14/	16/	20/	24/	27/	29/	34/	38/

No. 721.—Flat Hog Hair Tools, in Tin.

Per doz.—

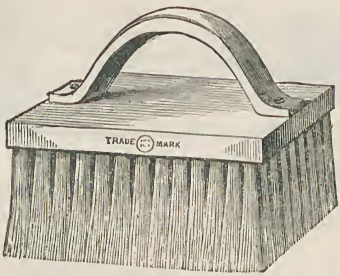
1	2	3	4	5	6	7	8	9	10	11	12	13
2/0	2/0	2/3	2/3	2/6	2/6	3/3	3/6	4/0	4/6	5/0	5/6	7/0

14	15	16	17	18	19	20	21	22	23	24	25
8/0	9/0	11/	12/	13/	17/	19/	21/	24/	27/	30/	36/



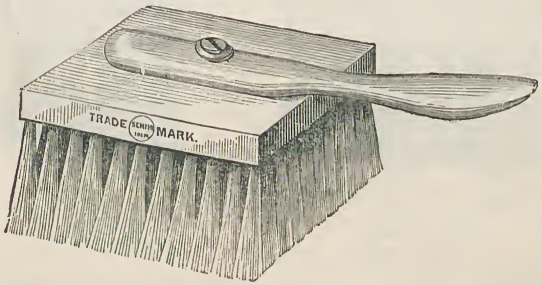
No. 722.—Stippling Brushes.

	6-in. × 4-in.	7-in. × 5-in.	8-in. × 6-in.
Each	No. 1, 7/6	No. 2, 10/0	No. 3, 13/0



No. 723.—Stippling Brushes.

	6-in. × 4-in.	7-in. × 5-in.	8-in. × 6-in.	9-in. × 7-in.
Each	No. 1, 7/6	No. 2, 10/0	No. 3, 13/0	No. 4, 17/0



No. 724.—Reversible Stippling Brushes.

	5-in. × 5-in.	6in. × 6-in.	7-in. × 7-in.	6-in. × 4-in.	7-in. × 5-in.	8-in. × 6-in.
Each	9/0	11/6	14/6	9/0	11/6	14/6

No. 725.—Veining Fitches.

Nos. 1 to 6 ... ... per doz. 3/6

These are made with fine long hair, and preserve a thin sharp edge, which makes them very useful for drawing lines as well as veining oak.

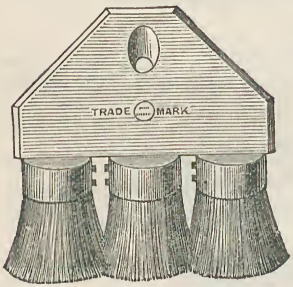
No. 726.—Flat Hog Hair Lining Tools, in Tin.

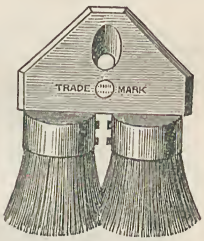
Width ...	¼-in.	½-in.	¾-in.	1-in.	1¼-in.	2-in.
Per doz.	3/6	5/0	5/6	6/6	11/0	15/0

With this tool a sharp line may be drawn about ⅛-in. wide.

No. 727.—Tar Brushes.

	Small.	Mid.	Large.
With short handles, per doz.	10/0	13/0	18/0
,, long handles ,,	13/0	16/0	21/0





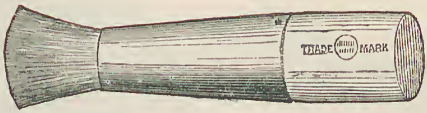
No. 728.—Tar Stock Brushes.

Two ring ... ... per doz. 24/0
Three ring ... ... ,, 36/0

No. 729.—Glue Brushes.

Iron Bound.

	1	2	3	4	5	6	7	8	9	10	12
Per doz.	2/9	3/0	3/6	4/6	5/6	6/6	7/6	8/0	10/6	12/0	15/0



No. 730.—Stencilling Brushes, in Tin.

	1	2	3	4	5	6	7	8	9	10	11	12
Per doz.	2/	2/6	2/9	3/	3/6	4/	4/6	5/	8/	9/	11/	13/

No. 731.—Best Stencilling Brushes, in Tin.

For decorators.

	1	2	3	4	5	6	7	8	9	10	11	12
Per doz.	2/9	3/6	5/	7/	9/	11/	13/	18/	21/	25/	28/	36/

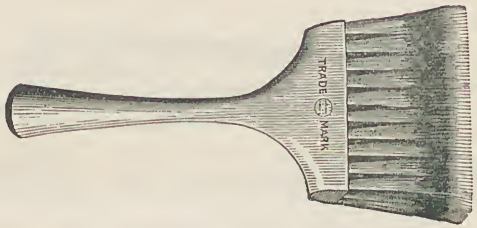
No. 732.—Round Stencilling Brushes, set in knots.

For decorators.

	Nos. 1	2	3	4	5
	2-in.	2½-in.	3-in.	3½-in.	4-in.
Each	2/6	3/6	4/6	6/6	8/6

No. 733.—Square Stencilling Brushes, set in knots.

6-in. by 4-in., with bent handles at end, each 12/0



No. 734.—Badger Softeners.

Nos.	1 2½-in.	2 3-in.	3 3½-in.	4 4-in.	5 4½-in.
Best quality ... each	6/0	8/0	9/6	11/6	14/0
,, extra full ,,	—	—	10/6	13/0	—
Medium quality ,,	4/6	6/0	7/6	9/0	12/0
Second ,, ,,	3/3	4/3	5/6	6/6	8/0
,, short hair ,,	2/3	2/9	3/3	3/9	4/6

No. 735.—Hog Hair Softeners.

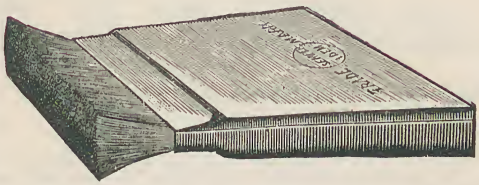
Nos. 1 2½-in.	2 3-in.	3 3½-in.	4 4-in.	5 4½-in.
Each 2/6	3/0	4/0	4/6	5/6

The hair is warranted to remain straight, and these tools may be used in turpentine, oil, or water, without injuring the cement.

No. 736.—Graniting Brushes.

Each ... 2/6

The hair divides, when wet, into irregular pencil-like tufts; the tips being applied to the palette, take up colour, which may thus be transferred to the granite, producing a varied and natural pattern.



No. 737.—Camel Hair Mottlers. $\frac{1}{8}$-in. thick.

Used chiefly for the soft woods.

	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Per doz. ...	11/6	17/3	23/0	28/9	34/6	40/3	46/0

No. 738.—Hog Hair Mottlers.

Per doz.—

	½-in.	¾-in.	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Thin, $\frac{1}{8}$-in.	2/4	3/6	4/	6/	8/	10/	12/	14/	16/
Middle, $\frac{3}{16}$-in. ...			5/	7/6	10/	12/6	15/	17/6	20/
Intermediate, $\frac{1}{4}$-in....			6/6	9/9	13/	16/3	19/6	22/9	26/
Thick, $\frac{3}{8}$-in.			7/6	11/3	15/	18/9	22/6	26/3	30/
Extra Thick, ½-in. ...			9/	13/6	18/	22/6	27/	31/6	36/

Note.—To preserve these tools, they should be washed in clean water after work, and dried, as the bristle has a tendency to decay or mildew if kept damp, when the hairs will break off and spoil the work. This frequently happens when all the tools are kept in a basket, or allowed to lie close together, so that the air does not circulate between them.

No. 739.—Solid Sable Overgrainers.

	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Per doz.	30/0	45/0	60/0	75/0	90/0	105/0	120/0

Used for fine maple overgraining; with a comb the hair may be divided into very delicate pencils.

Note.—To preserve this tool, it should be washed in clean water, combed, laid on a flat surface, and smoothed with the back of a comb; it should then be lifted with a sliding motion in the direction of the hairs, so that it will retain its shape, and be allowed to dry.

No. 740.—Sable Pencil Overgrainers.

	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Per doz.	21/0	31/6	42/0	52/6	63/0	73/6	84/0

Used for maple generally. They may be made with the tubes finer and closer together, but the pencils do not keep so distinct when in use; the best plan to make them separate is to wipe the pencils, when full of colour, on a wet sponge. Tin covers for securing the pencils from injury are made for these tools at about 2d. per inch.

Note.—To preserve them they should be washed, wiped on a clean nearly dry sponge, and kept dry with the pencils pointed.

No. 741.—Thin Hog Hair Overgrainers.

	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Per doz.	3/0	4/6	6/0	7/6	9/0	10/6	12/0

These tools may be used for overgraining any wood where moderately fine lines are required; with a comb the hair can be divided into small pencils, which will keep perfectly straight. They are much used for maple.

No. 742.—Hog Hair Pencil Overgrainers.

	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Per doz....	10/0	15/0	20/0	25/0	30/0	35/0	40/0

Made originally for walnut, but used for other woods.

No. 743.—Oak Overgrainers. In tin.

	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Per doz. ...	6/0	9/0	12/0	15/0	18/0	21/0	24/0

These are made of straight hair in tins, the same thickness as C. H. Mottlers. When thoroughly wet the hair will divide into irregular tufts if the points are passed over the edge of a knife, or the pot holding the colour.

No. 744.—Castellated Oak Overgrainers. In tin.

At same Prices.

No. 745.—Rosewood Fitch Hair Overgrainers.

	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Per doz. ...	7/0	10/6	14/0	17/6	21/0	24/6	28/0

No. 746.—Oak Overgrainers. In wood.

	3-in.	3½-in.	4-in.	4½-in.	5-in.	5½-in.	6-in.
Per doz. ...	24/0	27/0	33/0	38/0	44/0	55/0	60/0

No. 747.—Combs for Dividing Overgrainers.

Per doz. ... ... Single 6/6 Double 7/6

The single combs are 6-ins. long, and have the same teeth throughout. The double are 7-ins. long, one-half being fine, and the other coarse, like a dressing comb, but the teeth are cut in such a manner, as to cause the hair to divide with a sharp edge at the points.

No. 748.—Domed Camel Hair Dabbers.

Nos.	1	2	3	4	5	6	8
Per doz.	2/9	3/9	5/6	8/6	11/0	13/6	22/0

No. 749.—Domed Camel Hair Mops.

Nos.	1	2	3	4	5	6	7	8	9	10
Per doz.	3/6	4/0	6/0	9/0	11/6	13/0	17/6	21/0	25/0	30/0

No. 750.—Bear Hair Mops.

Nos.	1	2	3	4	5	6	7	8	9	10	11	12
Per doz.	2/	2/6	3/	3/6	4/	5/	6/6	8/	11/	13/	16/	18/

No. 751.—Round or Flat French Tools, in tin.

Nos.	1	2	3	4	5	6	7	8	9	10
Per doz.	1/1	1/2	1/3	1/4	1/5	1/6	1/7	1/8	1/9	1/10

11	12	13	14	15	16	17	18	19	20
2/0	2/3	2/6	2/9	3/3	3/9	4/3	4/9	5/6	6/0

No. 752.—Round Hog Hair Maple Eye Tools.

Per doz. ... ... Small, 3/6 Large, 4/6

No. 753.—Camel Hair Maple Dotters.

Per doz., assorted 3/0

No. 754.—Flat C. H. Varnish Brushes. In tin.

$\frac{1}{8}$-in. thick. Best quality. Cedar handles.

	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$-in.
Per doz.	4/8	7/0	9/3	11/6	14/0	16/3

	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4-in.
Per doz.	18/6	23/0	27/9	32/6	37/6

Camel hair brushes, wider than four inches, or of extra thicknesses, such as $\frac{3}{16}$-in., $\frac{1}{4}$-in., $\frac{5}{16}$-in., $\frac{3}{8}$-in., $\frac{7}{16}$-in., and $\frac{1}{2}$-in. thick; or in copper, zinc, and brass cases, or in wood only, are made to order at special rates.

The flat camel hair tools quoted above are made for spirit varnishes, lacquer, &c.

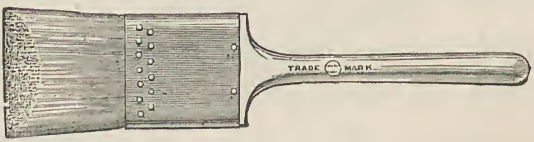
No. 755.—Flat Copying Press Brushes. In tin.

	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4-in.
Per doz.	6/0	7/6	9/0	10/6	12/0

No 756.—Flat French Varnish Brushes. In tin.

White handles.

	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4-in.
Per doz. ...	4/0	6/0	9/6	14/0	20/0	26/0	32/0



No. 757.—Flat Bevelled Edge Varnish Brushes. In tin.

	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4-in.
Per doz. ...	7/6	12/0	15/0	22/0	29/0	37/0	46/0

No. 758.—Brown Sable Writers.

Large swan...per doz.	45/0	Goose ... ... per doz.	10/0
Mid swan ... ,,	32/0	Duck ... ... ,,	4/0
Small swan... ,,	22/0	Crow ... ... ,,	2/6
Extra goose ,,	14/0	Lark ... ... ,,	2/0

No. 759.—Brown Sable Liners.

Large swan...per doz.	48/0	Goose ... . . per doz.	10/0
Mid swan ... ,,	36/0	Duck ... ... ,,	5/0
Small swan... ,,	24/0	Crow ... ... ,,	3/6
Extra goose ,,	15/0	Lark ... ... ,,	3/0

No. 760.—Short Brown Sable Pencils.

Large swan...per doz.	50/0	Goose ... ... per doz.	8/0
Mid swan ... ,,	40/0	Duck ... ... ,,	4/0
Small swan... ,,	26/0	Crow .. ... ,,	2/6
Extra goose ,,	12/0	Lark ... ... ,,	2/0

No. 761.—Short Red Sable Pencils.

Large swan...per doz.	54/0	Goose ... ... per doz.	12/0
Mid swan ... ,,	36/0	Duck ... ... ,,	6/0
Small swan... ,,	30/0	Crow ... ... ,,	3/6
Extra goose ,,	16/0	Lark ... ... ,,	2/6

No. 762.—Fitch Hair Pencils.

Per doz. ... Swan, 6/0 Goose, 2/0 Duck, 1/6 Crow, 1/0

No. 763.—Superfine Camel Hair Writers, Liners, or Short Pencils.

Per gross. Extra Goose, 14/0 Goose, 12/0 Duck, 6/0 Crow, 4/0 Assorted, 7/6

No. 764.—Ox Hair Writers, in tin, long red handles.

No. 765.—Ox Hair Pencils, ,, ,, ,,

	Nos.	1 2 3	4 5 6	7 8 9	10 11 12
Per doz.		1/6	2/0	2/6	3/0

	Nos. 13	14	15	16	17	18	19	20
Per doz. ...	3/6	4/0	5/0	6/0	7/0	9/0	10/0	12/0

No. 765a.—Card Wire.
Per Yard 2/0

No. 765b.—Chase Wedges.

Each	2½-in.	3-in.	3½-in.	4-in.
	1/6	2/0	2/3	2/6

No. 765B.

No. 765C.

No. 765c.—Clack Moulds to cast four sizes.
Per set 8/6

No. 765D.

No. 765D.

No. 765d.—Copper Bits, Straight or Hatchet.
Per lb. 1/3

No. 766.—Diamonds.

No. 1, 2 and 3.	Crown	each	12/0	15/0	18/0
,, 4.	Sheet	each			24/0
,, 5.	Plate	each			28/0 to 40/0
,, 6.	Shut-up...	each			19 6
,, 7.	Rack to Crown, 1, 2 or 3	extra	,,		2/0
,, 8.	Silver Ferrule, Ivory Handle	,,			22/6
,, 9.	Sheet with Rack	,,			27/0
,, 10.	Pencil for Writing	,,			12/0
,, 11.	Knife, Ivory Handle, two Blades	,,			20/0
,, 14.	,, Tortoise Shell Handle, two Blades	,,			21/0
,, 19.	Machine for cutting circles	,,			66/6
,, 19.	,, ,, ,, ...	,,			79/0
,, 21.	,, for cutting shades	,,			160/0

No. 767.—Dipped Rushes.
Per lb.... ... ... 10d.

DRESSERS.

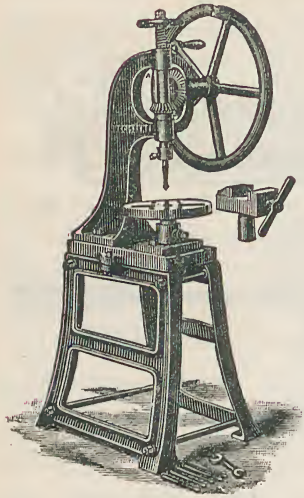
No. 768.—Box.
Each ... ... large 3/0 small 2/6

No. 768 and No. 769.

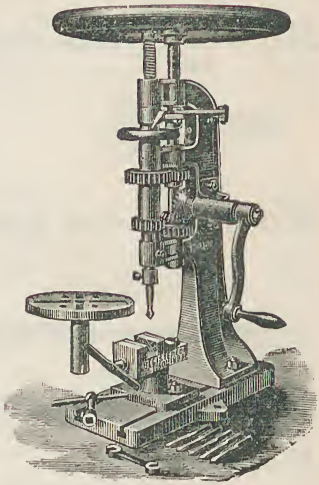
No. 769.—Hornbeam.
Each 1/4

No. 770.—Hand Drilling Machine.
Does not require any fixing or setting, drills up to ½-in. holes, each 12/0

DRILLING MACHINES.



No. 771A.



No. 771G.

No.	Height.		Weight.	Depth of feed.	Diameter of table.	Drills in centre of	Drills up to	Price of machine with table. Without stand.			Price of machine with table & vice. Without stand.		
	ft.	in.	lbs.	in.	in.	in.	in.	£	s.	d.	£	s.	d.
771A	2	3	100	2½	9½	10	¾	3	7	6	3	16	6
771B	2	7	150	3½	11½	12	1	4	14	6	5	8	0
771C	3	1	250	4½	13½	14	1¼	7	4	0	8	2	0
771D	3	0	252	3	13½	14	1¼	7	4	0	8	2	0
771E	2	3	100	2½	9½	10	¾	3	7	6	3	16	6
771G	3	6	258	4	11½	13	1¼	9	18	0	10	16	0

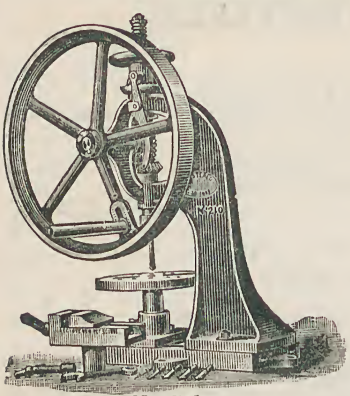
No. 771a & No. 771b are Quick Speed Drilling Machines, the pinion wheels are fitted with a distance bush, which prevents the teeth of the wheels from being broken and works more smoothly. No. 771B is similar to No. 771A but stronger.

No. 771c is an Extra Strong Drilling Machine, designed for heavy work. This machine is similar in design to No. 771A.

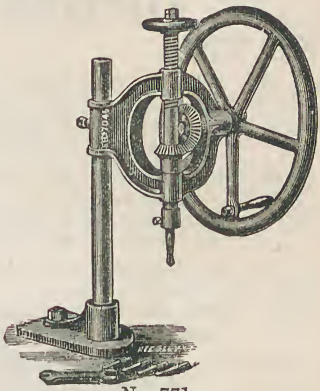
No. 771d & 771e are Lever Feed Machines, with fast and loose pulleys, designed for drilling or countersinking. The drill can be withdrawn quickly.

No. 771g is a Self-Feed Machine. It is fitted with double gear wheels, by which means either a quick or slow speed can be obtained, or the power multiplied for large holes by simply sliding the spindle tooth wheel in or out of gear with the other wheels.

DRILLING MACHINES.



No. 771H.



No 771J.

No.	Height.	Weight.	Depth of feed.	Diameter of table.	Drills in centre of	Drills up to	Price of machine with table. Without stand.	Price of machine with table & vice. Without stand.
	ft. in.	lbs.	in.	in.	in.	in.	£ s. d.	£ s. d.
771H	2 3	100	2½	9½	10	¾	3 16 6	4 5 6
771J	1 6	28	2½	no table	9	½	—	1 17 9

No. 771h is a Self-Feeding Machine, fitted with flat rim fly-wheel, which makes it suitable for hand or power.

No. 771j is a Small Radial Pillar Drilling Machine, it is very light, strong, and portable. By means of the set pin it can be raised or lowered on the pillar to suit any kind of work.

These machines have the following advantages, viz.:—The foot of each machine, the surface of the base plate and the pedestal which carries the table, are all planed true; this ensures accurate drilling. The pedestal and table can be removed to admit larger work, and when placed in the slots of the plate is again central with the drill. The table can be taken out of the pedestal and the vice put in and secured in any position by one steel set screw, the leg of this vice is turned and is free to revolve in the pedestal, by this means holes may be drilled round a circle or curve, or in a line, as desired.

These machines can be supplied without table, pedestal, and foot plate, at the following reduction in prices:—

For Machine that drills holes up to	¾-in.	1-in.	1¼-in.
Table	5/9	8/0	11/6
Pedestal	2/9	3/6	5/0
Foot plate	5/3	6/6	8/3

EXTRA.

Cast iron stand as shown for Nos. 771A, 771E, 771H, each	22/6
,, ,, ,, ,, 771B ... ... ,,	27/0
,, ,, ,, ,, 771C, 771D, 771G ,,	31/6

6 drills and a set of spanners sent with each machine, (with No. 771J, 4 drills).

FORGES (PORTABLE).

No. 772.

No. 01A 2-ft long, 1-ft. 6-in. wide, 2-ft. 6-in. high, each—
18-in. bellows, 59/6. 19-in. bellows, 63/0. 20-in. bellows, 66/6
Ditto, mounted on wheels ... ... extra £1 8 0
Anvil for ditto, each 20/0. Vice for ditto, each 17/0.

„ 00 2-ft. 2-in. long, 1-ft. 10-in. wide, 2-ft. 10 in. high,
22-in. bellows ... ... each 3 17 0
Ditto, mounted on wheels ... ... extra 1 8 0
Anvil for ditto, each 20/0. Vice for ditto, each 17/0.

„ 01 2-ft. 5-in. long, 2-ft. wide, 2-ft. 10-in. high, 24-in.
bellows ... ... each 4 4 0
Ditto, mounted on wheels ... ... extra „ 1 8 0
Anvil for ditto, each 20/0. Vice for ditto, each 17/0.

„ 02 2-ft. 7-in. long, 2-ft. 2-in. wide, 2-ft. 10-in. high,
26-in. bellows ... ... each 5 12 0
Ditto, mounted on wheels ... ... extra „ 1 8 0
Anvil for ditto, each 26/0. Vice for ditto, each 17/0.

„ 200 2-ft. 10-in. long, 2-ft. 6-in. wide, 3-ft. high, 28-in.
bellows ... ... each 7 0 0
Ditto, mounted on wheels ... ... extra „ 1 8 0
Anvil for ditto, each 40/0. Vice for ditto, each 17/0.

No. 773.—Improved New Pattern Wrought Iron Portable Forges.

No. 500A 2-ft. 5-in. long, 2-ft. wide, 2-ft. 10-in. high, 24-in.
bellows ... ... each £4 6 0
Anvil for ditto, each 20/0. Vice for ditto, each 17/0.

„ 500B 2-ft. 9-in. long, 2-ft. 3-in. wide, 2-ft. 10-in. high,
26-in. bellows ... ... each 5 17 0
Anvil for ditto, each 26/0. Vice for ditto, each 17/0.

„ 500C 2-ft. 10-in. long, 2-ft. 6-in. wide, 3-ft. high, 28-in.
bellows ... ... each 7 5 6
Anvil for ditto, each 40/0. Vice for ditto, each 17/0.

No. 774.—Improved New Pattern Wrought Iron Portable Forges, with Circular Bellows.

No. 500 2-ft. 5-in. long, 2-ft. wide, 2-ft. 10-in. high, 24-in.
circular bellows ... ... each £5 4 0
Anvil for ditto, each 20/0. Vice for ditto, each 17/0.

„ 501 2-ft. 9-in. long, 2-ft. 3-in. wide, 2-ft. 10-in. high,
26-in. circular bellows ... ... each 6 18 0
Anvil for ditto, each 26/0. Vice for ditto, each 17/0.

„ 502 2-ft. 10-in. long, 2-ft. 6-in. wide, 3-ft. high, 28-in.
circular bellows ... ... each 8 4 6
Anvil for ditto, each 40/0. Vice for ditto, each 17/0.

No. 775.—Gilders' Burnisher.

Agate ... ... each	1/9
Flint ... ... ,,	2/4

No. 776.—Gilders' Cushion.

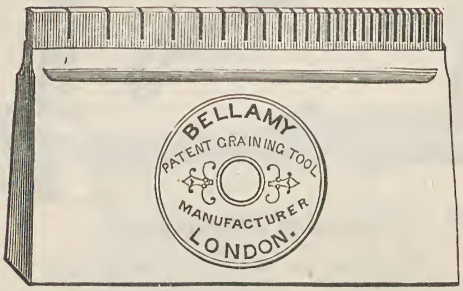
8-in. × 5½-in. ... ...per doz.	16/0
9-in. × 6¼-in. ... ... ,,	21/0

No. 777.—Gilders' Tips.

Card Tips ... ...per doz.	2/6
Double Tips ... ... ,,	6/0
Silver Tips ... ... ,,	4/6

No. 778.—Gilders' Knives.

With plain handles ... ...per doz.	9/0
With balance handles ... ... ,,	11/0



No. 779.—Bellamy's India-rubber Graining Combs.

For combing Oak in Water Colour.

They are made in sizes of 2, 3, 4, 5, and 6-in. The teeth are cut as follows :—

No. 1. Fine, about 12 per in.	No. 4. Graduated.
,, 2. Medium ,, 9 ,,	,, 5. Extra coarse, about 4 per in.
,, 3. Coarse ,, 6 ,,	,, 6. Irregular.

Extra fine, for panels, 15 and 18 teeth to the in., 0/4 per inch.

No. 780.—Graining Combs (Leather).

	2-in.	2½-in.	3-in.	3½-in.	4-in.
Graduated ... ... per doz.	—	—	4/0	5/0	5/6
Coarse, Mid, or Fine ,,	2/0	2/3	2/9	3/0	3/6

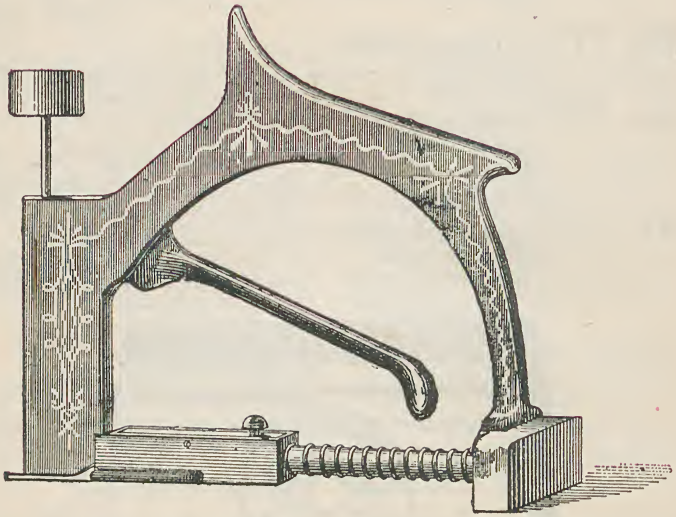
These are made of stout leather, cut by machinery. The teeth vary from 4 to 10 per inch.

No. 781.—Graining Combs (Steel).

Coarse, Mid, Fine, and Graduated.

	1	1½	2	2½	3	3½	4	4½	5	6-in.
Per doz.	1/6	2/3	3/0	3/9	4/6	5/3	6/0	6/9	7/6	9/3

4/0 per set of 12 in case.



No. 782.—The Glaziers' Point Driver.

6¾-in. long ... ... each 12/6

This tool, which is carefully constructed by experienced workmen, recommends itself to all glaziers, because they are enabled by its use to insert points with more than twice the rapidity of the old method, and with less liability to breakage of glass.

Directions for Use.—In using the Driver, press down lightly upon the glass, so as not to check the force of the blow, and move forcibly forward against the sash, which insures driving the points to the proper depth.

To increase or diminish the force of the blow, adjust the screw in the ram.

To take the Driver apart, draw the ram back until the driving plate is free from the guide plate, and let it come forward below the guide plate.

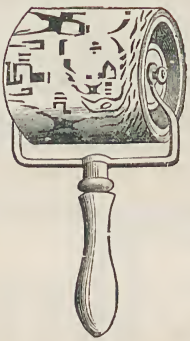
No. 783.—Glaziers' Points.

Exact size of Point.

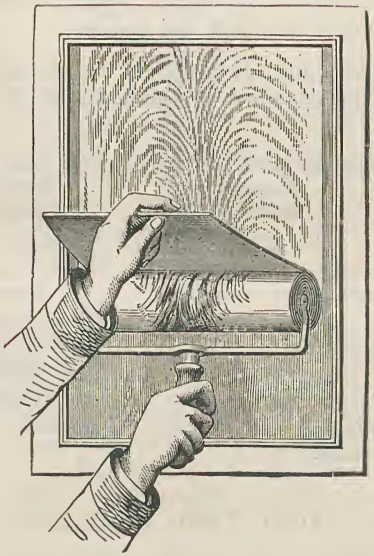
These points, as shown in cut, are designed for use in connection with the driver. They have the same bearing in the sash, project over the glass the same distance, and are guaranteed to hold the glass firmly in its place.

These points are cemented together in columns of about one hundred points each, ready for instantaneous insertion in the driver, by which they are struck off and driven one by one into the sash.

Per box of 5,000 points 1/8



No. 784.—Bellamy's Patent Graining Cylinders, mahogany mottle.



No. 785.—Bellamy's Patent Graining Cylinders, mahogany feather.

For Prices and Particulars, see next page.

No. 786.—Bellamy's Patent Graining Cylinders.

The cylinder has an engraved surface of absorbent leather, which removes the graining colour, according to the design thereon.

In the case of the mahogany feather, the leather is loose, one end being attached to a small roller *(see illustration)*, and is unrolled, or the reverse, against the surface to be grained.

They are constructed to produce great variety of work, and to do graining of any length or breadth.

The superiority of work by this system over the ordinary hand process, the great saving in time, and simplicity in application, renders it a most valuable tool to all in any way engaged in the imitation of woods and marbles. It may be adapted to work of every description, is very durable, and found to earn its cost in a few times using.

The designs are of the most superior description, being facsimiles of the choicest woods and marbles.

Full particulars, and all necessary instructions for working, sent with the cylinders, which are made for the following, and all other woods :—

Spanish mahogany mottle.
" " feathers
" " heart over-grain.

The mahogany feather, and some of the mottles, answer for satin wood.

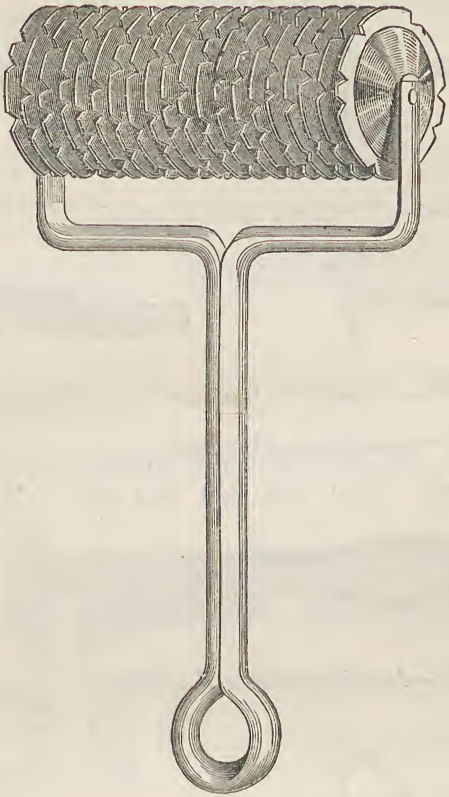
Satin wood mottle.
" " heart over-grain.
Maple mottle.
Oak, light veins.
Oak, dark veins.
" heart.
" pollard or knotted.
Walnut.
Birch.
" heart over-grain.
Hungarian Ash.
Hair wood.
Vein Marble, for white or Italian pink.
Sienna.

	3-in.	4-in.	5-in.	6-in.	7-in.	8-in.
Each ...	16/0	18/0	22/0	26/0	30/0	37/0

Mahogany or satin wood feathers, 6-in., 7-in., and 8-in.

Smaller sizes for stiles, margins, small panels, &c.

Each 1-in. 7/6 1½-in. 10/0 2-in. 12/0



No. 787.—Bellamy's Improved Oak Combing Rollers.

This most useful tool is the only one which gives oak graining the natural appearance of the wood. By its use fine lines of irregular lengths similar to the grains of oak, are printed on the veined work, producing a superior effect to the ordinary combing.

The set consists of six separate rollers, varying as to the spaces between the lines, fitted into a box, so that they may be carried without injury. The box also contains a brush to feed them with colour, which is constructed to fit the roller frames, so that one hand only is required for the work instead of both as formerly.

Sizes—½-in., 2-in., 3½-in., 6-in.

They may be had in sets with feeding brush, which fits the roller frame.

They vary as to space between the lines.

No. 1, fine; 2, medium; 3, coarse; 4, graduated; 5, irregular.

The set (six rollers) contains one ½-in., four 2-in., one 3½-in., fitted in box with feeding brush						per set	18/0
	½	2	3½	4½	6	inch.	
Separate rollers	1/7	2/6	3/0	3/9	4/0	each.	
Feeding brushes	—	1/0	1/9	2/6	3/6	,,	

A 6-in. roller, with feeding brush, in box, complete, each 8/0

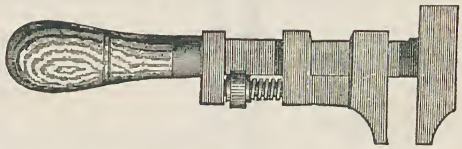
No. 788.—Cistern Hammer... ... each 2/0 2/6 3/0

,, 788a.—Plumber's Claw Hammer ... ... each 2/6

No. 788b.—Glazier's Hammer ... ... each 2/0

,, 789.—Iron Screw Hammer.

	8	9	10	11	12	14	16	18-in.
Each	2/10	3/3	3/8	4/0	4/6	5/3	6/6	8/0



No. 790.—American Screw Hammers.

	6	8	10	12	15-in.
Each	3/0	3/4	4/0	4/8	8/0

No. 791.—Plumber's Iron ... ... per lb. 7d.

,, 791a.—Bossing Iron ... ... ,, 7d.

No. 791b.—Glazier's Iron ... ... each 2/0 2/6 3/0

No. 792.—Closing Knife, ea. 1/9

No. 792a.—Chipping Knife, ea. 1/3

No. 792b.—Drawing Knife, ea. 1/6

No. 792c.—Hacking Knife, ea. 9d.

No. 792d.—Paperhangers' Knife, each 2/0

No. 792e.—Lead Knife, each 2/0

No. 792g.—Palette, each.

4	5	6	7	8	9	10	11	12	13	14	15	16-in.
5d.	7d.	8d.	10d.	1/1	1/5	1/10	2/6	3/2	3/10	4/8	5/6	6/2

No. 792h.—Putty Knife, ea. 9d.

No. 792j.—Putty Knife with laddekin handle, ea. 10d.

No. 792k.—Short Stopping Knife, each 11d.

No. 7921.—Long Stopping Knife each 1/2

No. 792m.—Chisel Stopping Knife, each 1/2

No. 792p.—Short Facing Knife, each 1/0

No. 792r.—Trowel Stopping Knife, each 1/2

No. 792t.—Gilder's Knife, ea. 1/0

No. 793.—Laddekins.

Bone, 1/3 each. Wood, 1/0 each.

No. 794.—Ladles.

	2	2½	3	3½	4	4½	5	5½	6	7-in.
Per doz.	4/0	5/6	6/0	7/6	8/6	10/0	11/6	14/6	17/0	25/0

Heavy ditto, 8d. per lb.

No. 795.—Leathers (Chamois).

Per doz. 9/0 12/0 15/0 18/0

No. 796.—Mahl Sticks (Folding).

The parts, when screwed together, form a strong stick, with an even surface.

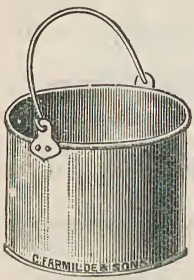
Each 3/0

No. 796a.—Mallets (Tinman's).

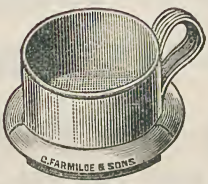
2½-in.... ... ...each 1/3
3-in. ... ... ,, 1/6
3½-in.... ... ... ,, 2/0

No. 797.—Mat Baskets (Wood Bottoms).

Per nest 6/0



No. 798.



No. 799.

No. 799A.

No. 798.—Paint Cans.

	Nos. 1.	2	3
Diameter,	5½-in.	7-in.	8-in.
Tin or zinc ... ... per doz.	8/0	10/0	12/0
Galvanized iron ... ... ,,	5/0	6/0	7/6

No. 799.—Paint Straeinrs (Copper Bottoms).

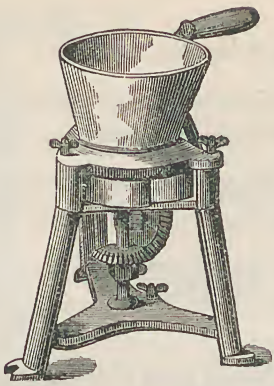
Fine or coarse, large.. .. ..each 2/6 Small 2/0

No. 799a.—Ditto, Fine or coarse, taper... ... ... each 1/6

,, 800.—Paint Stones and Mullers.

,, 801.—Painter's Pallettes (Mahogany).

	6	7	8	9	10	11	12	13	14	15	16-in
Square or oval, per doz.	5/	6/	7/6	9/6	12/	14/	17/	20/	23/	26/	30/



No. 802.—Edwards' Paint Mills.

No. 1.	Power Mill, 18-in. high, 11-in. across top ... ... each	£5	10 0
„ 2.	Hand Mill, 17-in. high, 7¾-in. across top ... ... each	3	3 0
„ 3.	Hand Mill, 15-in. high, 6½-in. across top ... ... each	2	10 0
Pulleys to Nos. 2 or 3 ... ... „		1	0 0
„ „ 1 ... ... „		1	10 0
Fly-wheels to Nos. 2 or 3 ... „		0	6 0
„ „ 1 ... ... „		0	10 0

No. 803.—Improved Paint Mills.

	Weight.	Diameter of Grinding Surface.	Capacity of Hopper.	Height.		
No. 000.	16-lbs.	4½-in.	3-pints	1-ft. 2-in., each	£1	5 0
„ 00.	23 „	5 „	3 „	1 „ 3 „ „	2	2 0
„ 0.	28 „	6 „	2-quarts	1 „ 4 „ „	2	15 0
„ 1A.	56 „	6½ „	3 „	1 „ 8 „ „	3	3 0
„ 1 with fly wheel	112 „	7 „	1-gall.	1 „ 10 „ „	4	4 0

No. 804.—Paper Hangers' Rollers.

	Covered.	Uncovered.
7-in., with handle to screw on and off, for convenience in carrying ... each	3/0	2/0
3½-in., with a fixed handle, formed by a prolongation of the iron frame, each	1/6	1/0

The rollers are covered externally with fine thick flannel, or with chamois leather, under which is a layer of flannel to form a soft cushion.

Seam rollers of plain boxwood, 1½-in. wide, each 1/0

No. 805.—Bell Hangers' Cutting Pliers.

Each ... 2/4

No. 806.—Bright Burner Pliers.

2-hole, 6-in.... ... ... each 1/10
„ 7-in.... ... ... „ 2/2

No. 807.—Registered Combination Pliers.

Combining the Bell Hangers' Cutting Pliers, with wire cutters at the side, and the Gas Burner Pliers.

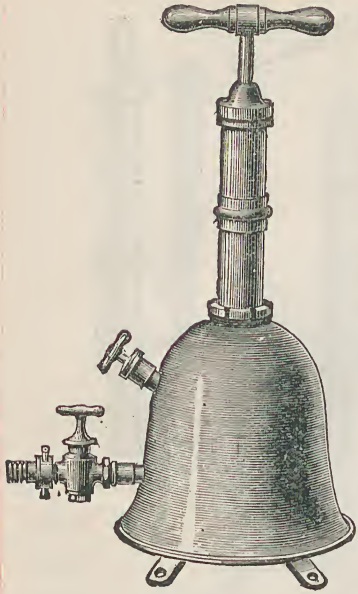
Each 6-in. 2/0 7-in. 2/4

No. 808.—Registered Combination Pliers, as 807, but with turnscrew and rymer.

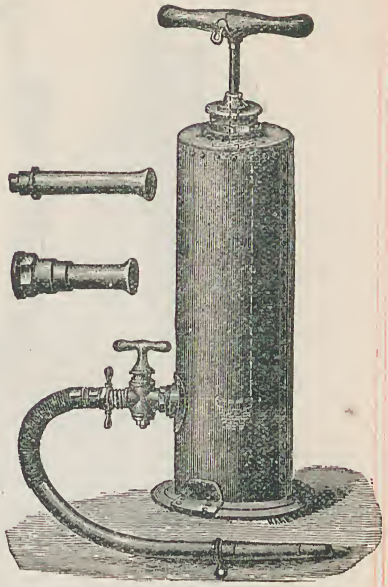
Each 6-in. 2/3 7-in. 2/7

No. 809.—Gas Pliers.

	7-in.	8-in.	9-in.	10-in.	11-in.	12-in.
Two hole, per doz.	14/9	18/9	22/6	26/6	30/6	34/6
Three „ „	18/0	22/0	26/0	30/0	34/0	38/0



No. 809A.



No. 809B.

No. 809a.—Gas Service Cleansing Pump, with copper cylinder.

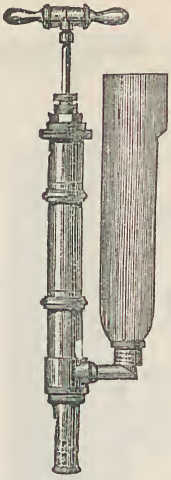
Complete with 2-ft. of strong India-rubber Hose, with brass taper connection for forcing gas pipes, from $\frac{3}{8}$-in. to $1\frac{1}{4}$-in. ... ... each £3 3 0

No. 809b.—Gas Service Cleansing Pump, with galvanized iron cylinder.

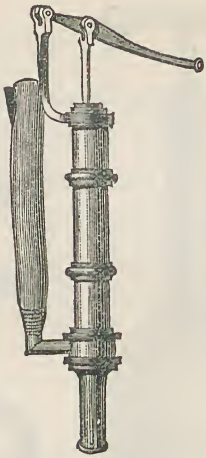
Complete ... ... each £2 15 0

INSTRUCTIONS.

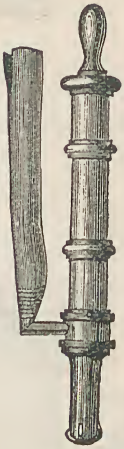
By closing the stop cock and working the handle a great pressure can be obtained in the cylinder, which on being suddenly released into the service pipes, clears away any obstruction or dirt.



No. 810.



No. 811.



No. 812.

No. 810.—Plumbers' Force, T handle ... ... each 30/6

„ 811.— „ „ lever handle ... „ 35/0

„ 811a.—Ditto, extra strong ... ... „ 63/0

„ 812.—Plumbers' Force, wood plunger ... „ 27/6

„ 812a.—Ditto, large ... ... „ 40/0

„ 813.—Plumbers' Force, brass bow handle.

Without hose ... ... each 15/0
With india-rubber hose ... ... „ 19/6
With leather hose ... ... „ 21/0

No. 814.

No. 815.

No. 816.

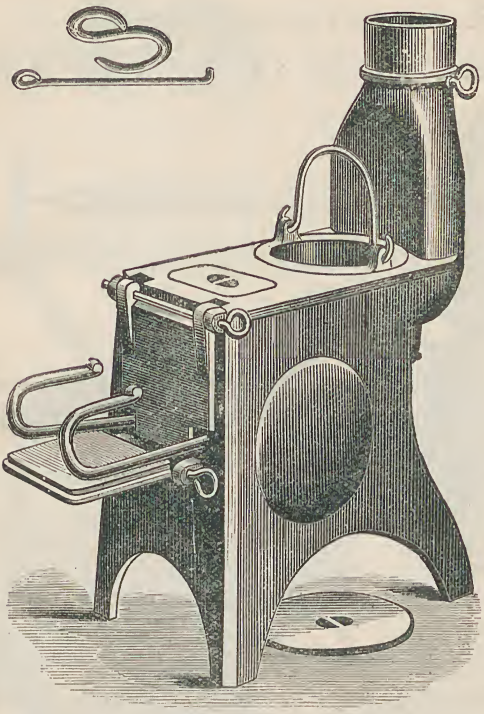
No. 814.—India-rubber Force Cup.

Very useful for forcing pipes from sinks, wash-basins, &c. ... each 1/9

No. 815.—Plumbers' Hatchets ... ... „ 2/4

„ 816.—Plumbers' Malls.

Each ... ... Box, 3/0 Hornbeam. 2/0



No. 817.—The Plumbers' Stove.

This stove is particularly recommended to Plumbers, Gas and Water Companies, for general shop or out-door use. It is simple in construction, portable, safe, cleanly, most effective in operation in any weather, durable, and saves both time and fuel.

Each 25/0

DIRECTIONS FOR USE.

For out-door work eight feet of upright smoke pipe will be found sufficient. For shop, according to convenience, if above that length.

Moderately soft coal, broken rather small, or good screened slack is much better than coke.

Let the first fire burn up freely before putting on the pot.

Keep the bars clean and covered; bring most of the fire to the front before mending.

A moderate fire is better than a full one. If with a full fire the smoke should prove troublesome, give it a little air at the feed-hole by partly removing the lid.

The irons (unless large ones) should not be put in until the metal is nearly hot.

When required to be left, shut the bottom door, fill up with fuel, and shut the valve.

Carry the stove with the accompanying S hook, placed between the pot and feed-holes, with a bar of iron pipe run through.

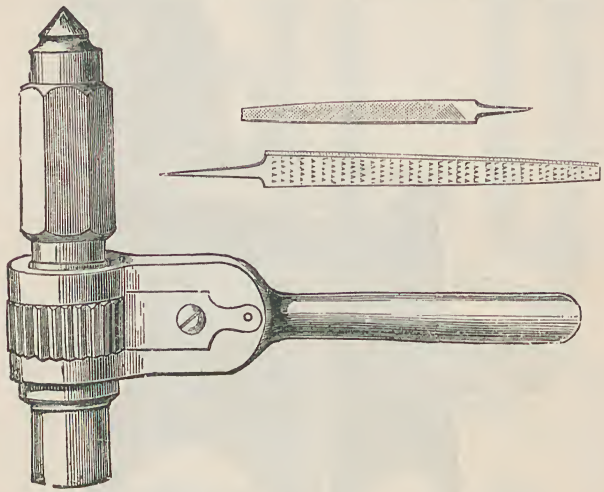
Height, 27-in. Length, 16½-in. Width. 12½-in. by 8½-in.

	LEAD.	SOLDER.	TIN.
Capacity of pot	40-lbs.	36-lbs.	26-lbs.

Weight of stove, 1 cwt. 0 qrs. 20 lbs.

No. 818.—Rasps or Files (flat or half-round).

	8	9	10	11	12	13	14	15	16-in.
Each ...	0/9	0/11	1/2	1/4	1/6	1/9	2/3	3/0	3/6



No. 819.—Ratchet Drill Braces.

	10	12	14	16	18	20	22	24-in.
Each	16/6	20/0	24/0	27/6	31/0	34/6	38/0	42/0

Drills for ditto.

Assorted, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1-in. ... ... each 1/9
,, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{2}$-in. ... ... ,, 2/3

No. 820.—Rules.

Plumbers' 2-ft. 2-fold., with brass slide.

Plain ... ... each 2/9
Bound one side... ... ... ,, 3/6
,, both sides ... ... ,, 4/4
Plumbers' 2-ft. 4-fold ... ... ,, 4/4

GLAZIERS' LATHS.

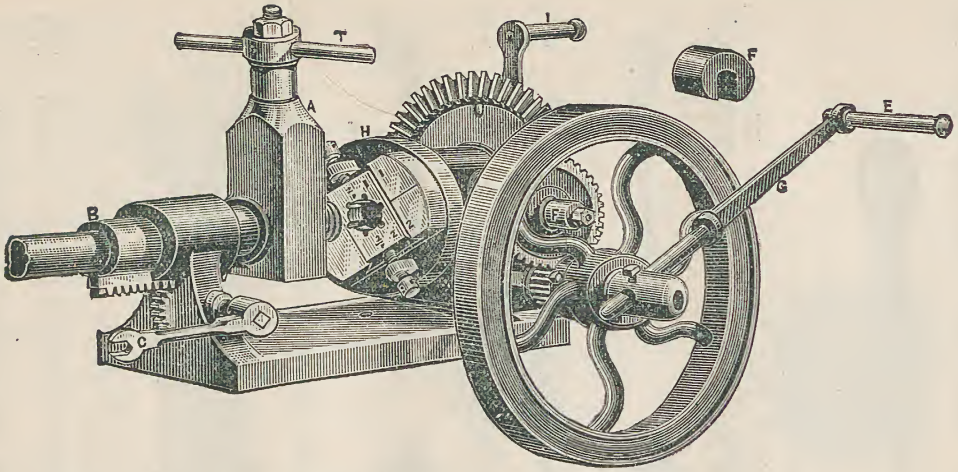
	24	30	36	48	60-in.
Each	1/0	1/3	1/6	2/0	2/9

GLAZIERS' T SQUARES.

	24	30	36	42	48-in.
Each	2/0	2/6	3/0	3/6	4/0

EXTRA.

Ditto, extra strong, with brass band ... ... each 2/0



PAIR OF EXTRA WHEELS

No. 821.—Improved Screwing Machines.

For gas and steam tubes, fitted with adjustable dies. A full thread is attained by one screwing.

No. 1	Screwing Machine for ½, ¾, and 1-in., with 3 pairs of dies, complete ... ... each	£7	5	0
,, 1A	Screwing Machine for ¼, ⅜, ½, ¾, and 1-in., with 5 pairs of dies, complete ... ... ,,	8	0	0
,, 2	Screwing Machine for 1, 1¼, 1½, and 2-in., with 4 pairs of dies, complete, but without fly wheel ,,	12	0	0
,, 2B	Screwing Machine for ¼, ⅜, ½, ¾, 1, 1¼, 1½, and 2-in., with 8 pairs of dies, complete, without fly wheel ,,	15	0	0
,, 2	If with two extra wheels (see illustration) to increase the speed of ¾-in. and downwards, by which four screwings instead of one are obtained ... ... each	15	15	0
	Nos. 2 and 2B, if fitted with 20-in. fly wheel, weight 80-lbs. (as shown in engraving) ... ... extra	1	5	0
	,, ,, machines if made with self-feeding cutting-off apparatus ... ... ,,	3	8	0

Extra dies, for No. 1, 7/6 per pair. For No. 2, ¼, ⅜, ½, and ¾-in., 14/0 per pair; 1, 1¼, 1½, and 2-in., 15/0 per pair.

No. 822.—Scissors (Paperhanger's).

Per pair ... 10-in. 3/3 11-in. 4/0 12-in. 4/7

No. 823.

No. 823.—Screw Drivers.

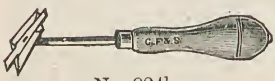
	6-in.	7-in.	8-in.	9-in.	10-in.	12-in.
Per doz.	16/0	18/0	20/0	22/6	25/0	30/0

No. 824.

No. 824a.

No. 824.—Straight Shave Hook ... ...each 1/3

,, **824a.**—Bent Shave Hook ... ... ,, 1/6



No. 824b.

No. 824c.

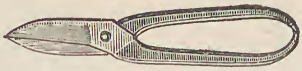
No. 824b.—Soil Pipe Shave Hook... ... ...each 1/9

,, **824.c**—Spoon Shave Hook ... ... ,, 1/6

No. 824d.

No. 824d.—Triangular Shave Hook ... ...each 1/3

,, **824e.**—Patent Shave Hook, combining 824, 824b, and 824d in one ... ...each 4/0



No. 825.—Shears, for cutting zinc, &c.

Each 8-in. 1/9 9-in. 2/4 10-in. 2/9 12-in. 3/6

No. 827.—Light Solder Pots, with bails.

	4	5	6	7	8	9	10	11	12-in.
Each	1/3	1/5	1/8	2/0	2/6	3/2	3/8	4/2	5/10

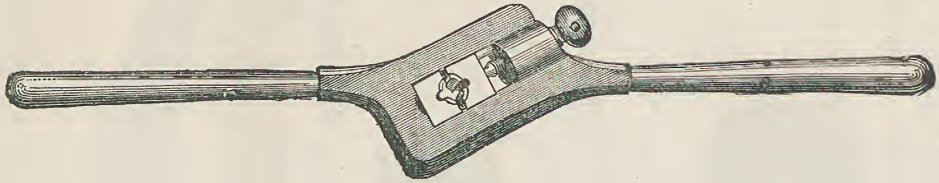
No. 827a.—Strong Solder Pots, with bails.

	4	5	6	7	8	9	10	11	12-in.
Each	1/3	1/5	1/8	2/2	2/10	3/6	4/0	4/8	6/6

No. 828.—Centre-Screw Adjusting Automaton Spanner.

Nos.	1	2	3	4	5	6	7	8	9	10
Length,	5½	6¼	8½	10	12½	15	17½	20	24	26-in.
Span,	½	⅝	¾	1	1¼	1½	1¾	2	2¼	2½-in.
Each	4/4	4/8	5/8	7/6	9/4	11/9	15/0	18/6	22/6	26/6

No. 8.



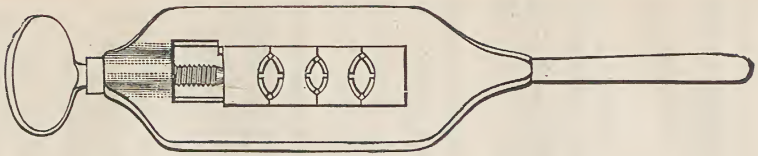
No. 8A.

No. 829.—Stocks and Dies for iron gas tubing. With taper and plug tap to each size.

					No. 8 or 8A per set.
		1/4	3/8	... ...	15/0
	1/8	1/4	3/8	... ...	19/0
	1/4	3/8	1/2	... ...	27/0
		3/8	1/2	... ...	22/0
1/4	3/8	1/2	3/4	... ...	45/0
	3/8	1/2	3/4	... ...	39/6
		1/2	3/4	... ...	32/0
	1/2	5/8	3/4	... ...	39/6
3/8	1/2	5/8	3/4	... ...	45/0
	1/2	3/4	1	... ...	44/0
		3/4	1	... ...	37/0
3/8	1/2	3/4	1	... ...	52/0

					No. 8 or 8A per set.
1/2	5/8	3/4	1	... ...	54/0
1/4	3/8	1/2	3/4	1 ...	61/0
	3/4	1	1 1/4	... ...	59/0
		1	1 1/4	... ...	48/0
			1 1/4	only ...	39/6
1/2	3/4	1	1 1/4	... ...	70/0
	1	1 1/4	1 1/2	... ...	91/0
		1 1/4	1 1/2	... ...	79/0
			1 1/2	only ...	60/0
3/4	1	1 1/4	1 1/2	... ...	103/0
	1 1/4	1 1/2	1 3/4	... ...	101/6
		1 1/2	1 3/4	... ...	87/0

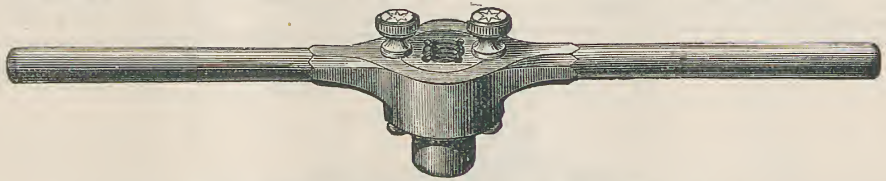
					No. 8 or 8A per set.
	1 1/4	1 1/2	2	... ...	112/0
		1 1/2	2	... ...	91/0
			2	only ...	70/0
1	1 1/4	1 1/2	2	... ...	129/6
1 1/4	1 1/2	1 3/4	2	... ...	136/6
	1 1/2	2	2 1/4	... ...	147/0
		2	2 1/4	... ...	122/0
	2	2 1/4	2 1/2	... ...	196/0
		2 1/4	2 1/2	... ...	157/6
	2 1/4	2 1/2	3	... ...	294/0
		2 1/2	3	... ...	241/6
	2 1/2	2 3/4	3	... ...	315/0



No. 830.—Stocks and Dies. For brass tube, with taper and plug tips to each size. Per set—

For ¼ Iron ⅜ ½	Brass Tube 18/0	For ¼ ⅜ ½ ⅝	Brass Tube 21/0
,, ⅜ ½ ⅝	,, 18/0	,, ⅝ ½ ⅝ ¾	,, 22/6

For ¼ ⅜ ½ ⅝ ¾	Brass Tube 27/0
,, ¾ ⅞ 1	,, 34/6



No. 831.—Patent Solid Die Stocks. For screwing gas tubes at once over.

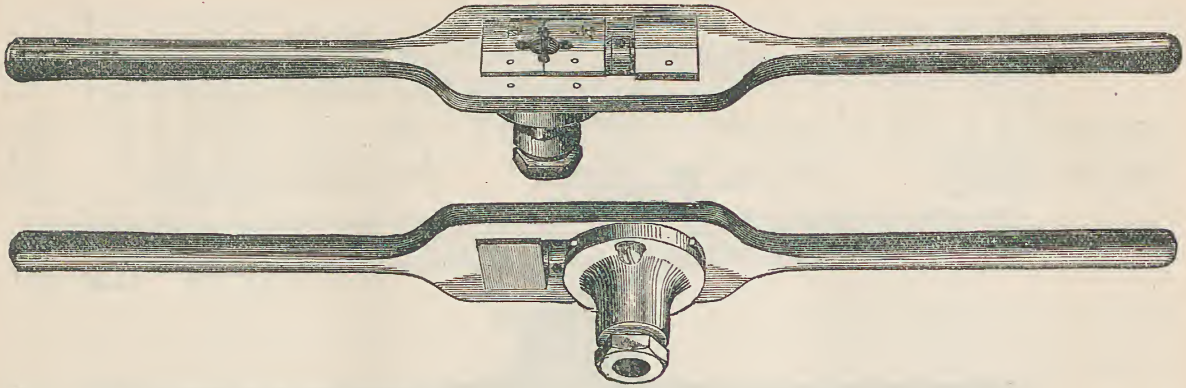
A perfect screw can be cut on gas tube by this tool once going down, thereby effecting a great saving of time and labour. The dies are made slightly taper, so that if there is a variation in the size of the tubes or fittings, they can be made to fit equally well.

Stock.				Per set, with Taper & Plug Tap to each size.	Dies, each.	Guides, each.
A			¼ ⅜ ½	£1 2 0	3/6	1/6
		⅛	¼ ⅜ ½	1 10 0		
			⅜ ½ ¾	1 11 0		
B			¼ ⅜ ½	1 18 0	4/9	1/9
		⅛	¼ ⅜ ½	2 6 6		
			⅜ ½ ¾	2 2 0		
C			⅜ ½ ¾	2 12 0	6/6	2/6
		¼	⅜ ½ ¾	3 4 0		

Stock.				Per set, with Taper & Plug Tap to each size.	Dies, each.	Guides, each.
D			¾ 1	£2 12 0	7/6	3/0
		½	¾ 1	3 3 0		
	⅜	½ ⅝	¾ 1	3 17 0		
	½	⅝ ¾	1	3 18 6		
E		1	1¼	3 10 0	10/0	3/6
		¾ 1	1¼	4 10 0		
	½	¾ 1	1¼	5 8 0		

Stock.				Per set, with Taper & Plug Tap to each size.	Dies, each.	Guides, each.
F			1¼ 1½	£4 16 0	13/6	4/6
		1	1¼ 1½	6 0 0		
	¾	1	1¼ 1½	7 4 0		
G			1½ 2	6 10 0	17/0	6/0
		1¼	1½ 2	8 0 0		
	1	1¼	1½ 2	9 10 0		
	1¼	1½	1¾ 2	10 5 0		

West Smithfield, London, E.C.



No. 832.—Patent Adjustable Taper-Die Stocks. A full thread attained at one screwing.

Gas Stocks, with Patent Adjustable Dies only.		£	s.	d.	Do., with Taps, Plug and Taper.	£	s.	d.
No. x 11	$\frac{1}{8}$ $\frac{1}{4}$ $\frac{3}{8}$	1	1	0		1	15	0
,, x 12	$\frac{1}{4}$ $\frac{3}{8}$ $\frac{1}{2}$	1	11	0		2	8	6
,, x 13	$\frac{3}{8}$ $\frac{1}{2}$ $\frac{3}{4}$	1	16	6		2	18	0
,, x 14	$\frac{3}{8}$ $\frac{1}{2}$ $\frac{3}{4}$ 1	2	12	0		4	5	6
,, x 21	$\frac{1}{2}$ $\frac{3}{4}$ 1	2	2	0		3	10	0
,, x 22	$\frac{3}{4}$ 1 $1\frac{1}{4}$	2	12	0		4	11	0
,, x 31	1 $1\frac{1}{4}$ $1\frac{1}{2}$	3	5	0		5	18	0
,, x 35	1 $1\frac{1}{4}$ $1\frac{1}{2}$ 2	4	18	6		9	16	0
,, x 41	$1\frac{1}{4}$ $1\frac{1}{2}$ 2	4	1	0		7	18	0

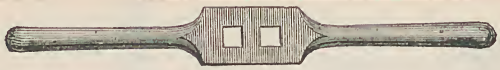
Gas Stocks, with Patent Adjustable Dies only.		£	s.	d.	Do., with Taps, Plug & Taper.	£	s.	d.
No. x 42	$1\frac{1}{2}$ $1\frac{3}{4}$ 2	4	1	0		8	10	6
,, x 43	$1\frac{1}{4}$ $1\frac{1}{2}$ $1\frac{3}{4}$ 2	4	18	6		10	5	0
,, x 45	$1\frac{1}{2}$ 2 $2\frac{1}{4}$	6	11	0		12	6	0
,, x 47	2 $2\frac{1}{4}$	5	10	0		9	14	0
,, x 49	2 $2\frac{1}{4}$ $2\frac{1}{2}$	13	5	0		20	15	0
,, x 50	$2\frac{1}{4}$ $2\frac{1}{2}$ 3	17	5	0		28	5	0
,, x 51	$2\frac{1}{2}$ 3	15	9	0		24	0	0
,, x 52	$2\frac{1}{2}$ $2\frac{3}{4}$ 3	17	5	0		29	11	0
,, x 53	$2\frac{1}{4}$ $2\frac{1}{2}$ $2\frac{3}{4}$ 3	19	2	0		33	16	0

No. 832a.—Double-action Ratchet Screw Stock, with Circular Dies (Whitworth's Standard Gas Threads), and with Guides.

This Ratchet Stock is provided with a right and left-hand feed motion, fitted with dies and guides for each size of pipe whereby a perfect thread is secured under any difficulty arising from limited space.

An important consideration is the diminution of labour in opening the ground, a small aperture only being necessary to bring the tool into action, and from the smallness of space, especially in crowded thoroughfares, there is less liability of accident. Prior to coupling the joints, the pipes may be cut through with the greatest ease, by applying the Rotary Tube Cutters—a few inches space is only required, the pipes can be cut out and screwed, and the couplings completed in any critical position, without the assistance of a fitter.

			Per set.	Extra Dies.	Extra Guides or Regulators.
¼	⅜	½-in.	50/0 ...	4/0	1/9
½	¾	1 ,,	66/6 ...	7/3	2/6
¾	1	1¼ ,,	83/6 ...	8/3	3/3
1	1¼	1½ ,,	106/0 ...	10/0	3/9
1¼	1½	2 ,,	130/6 ...	14/3	5/3
2	2¼	2½ ,,	212/0 ...	21/0	8/0
2¼	2½	3 ,,	275/0 ...	30/0	10/6



No. 833.—Tap Wrenches.

For	1/4	3/16-in.		...	each	3/6	For	7/8	1 -in.	...	each	10/0
,,	1/4	3/8	,,	...	,,	4/0	,,	1	1 1/8 ,,	...	,,	11/0
,,	1/4	5/16	,, 3/8	...	,,	4/0	,,	1 1/8	1 1/4 ,,	...	,,	12/0
,,	3/8	7/16	,,	...	,,	5/0	,,	1 3/8	1 1/2 ,,	...	,,	16/0
,,	7/16	1/2	,,	...	,,	5/0	,,	1 1/4	1 1/2 ,,	...	,,	16/0
,,	3/8	1/2	,,	...	,,	5/0	,,	1 5/8	1 3/4 ,,	...	,,	20/0
,,	1/2	5/8	,,	...	,,	6/0	,,	1 7/8	2 ,,	...	,,	24/0
,,	1/2	5/8	3/4 ,,	...	,,	7/6	,,	2	2 1/4 ,,	...	,,	28/0
,,	3/4	7/8	,,	...	,,	9/0	,,	2 1/4	2 1/2 ,,	...	,,	40/0

No. 834.—Tap Wrenches (for Gas Fitters).

Each	1/8, 1/4, 3/8-in. 10/0	1/4, 3/8-in. 8/6	1/4, 3/8, 1/2-in. 12/0	1/4, 3/8, 1/2, 3/4-in. 14/0
Each	3/8, 1/2, 3/4-in. 13/0	1/2, 3/4, 1-in. 16/0	1/2, 5/8, 3/4, 1-in. 16/0	3/4, 1, 1 1/4-in. 19/0
Each	1, 1 1/4, 1 1/2-in. 25/0	1 1/4, 1 1/2, 2-in. 33/0	1 1/2, 1 3/4, 2-in. 39/0	2 1/2, 2 3/4-in. 40/0
Each	... ...	2 3/4, 3-in. 48/0	2 1/4, 2 1/2, 3-in. 56/0	

No. 835.—Sucker Hooks.

Each ... ... single, 4/3 double, 8/6

No. 836.—Gas Tongs.

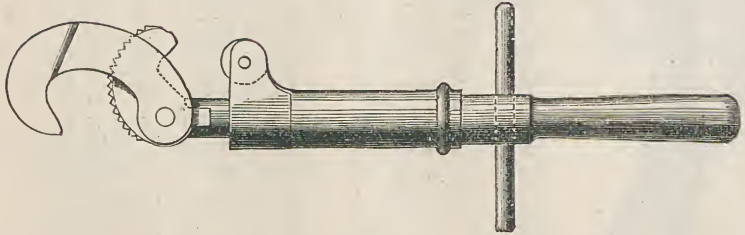
	1/4-in.	3/8-in.	1/2-in.	3/4-in.	1-in.	1 1/4-in.	1 1/2-in.	2-in.
For tube, per pair	1/3	1/6	1/11	2/3	2/9	3/9	4/3	5/9
For sockets ,,	1/6	1/11	2/3	2/9	3/9	4/3	5/9	7/3

Ditto, extra strong.

	1/4-in.	3/8-in.	1/2-in.	3/4-in.	1-in.	1 1/4-in.	1 1/2-in.	2-in.
For tube, per pair	1/9	2/0	2/6	3/0	3/9	4/6	5/9	8/9
For sockets ,,	2/0	2/6	3/0	3/9	4/6	5/9	7/3	10/9

No. 837.—Tongs (Registered Parrot Nose).

No. 0, $\frac{1}{8}$ to $\frac{1}{2}$-in. ... each 5/6	No. 3, 1 to 2- in. ... each 12/0	No. 6, 2 to 4-in. ... each 33/0
,, 1, $\frac{1}{4}$,, 1 ,, ... ,, 7/0	,, 4, $1\frac{1}{4}$,, $2\frac{1}{2}$,, ... ,, 18/0	,, 7, 2 ,, 5 ,, ... ,, 44/0
,, 2, $\frac{1}{2}$,, $1\frac{1}{4}$,, ... ,, 9/0	,, 5, $1\frac{1}{2}$,, 3 ,, ... ,, 22/0	,, 8, 3 ,, 6 ,, ... ,, 56/0



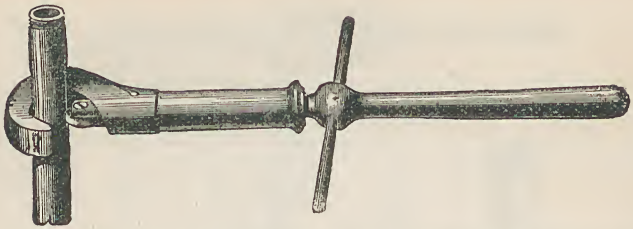
No. 838. — Registered Tube Cutter and Wrench combined.

The grip and spindle are made of cast-steel, and will be found equal to any strain, however great. The clip or pipe jaw and roller cutter are permanent fixtures ; they create no inconvenience in either operation, and are ready for immediate use, whether for cutting a pipe or screwing up a joint.

No. 31, $\frac{1}{4}$-in. to 1-in., each 17/6. No. 32, 1-in. to 2-in., each 26/0. No. 33, 2-in. to 4-in., each 35/0.

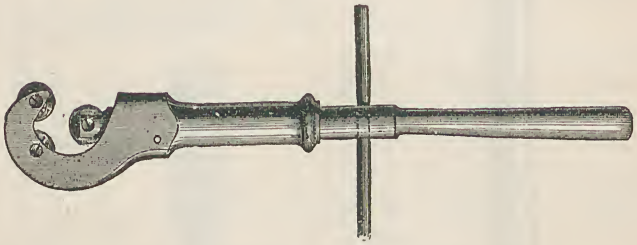
Extra knives, per doz., No. 31, 12/0 ; Nos. 32 and 33, 18/0.

When extra leverage is required, it is better to apply an additional wrench. To place the handle inside a tube to gain extra pressure, will probably snap the grip.



No. 839.—Tube Cutters (improved direct action), single knife.

No. 10, to cut ¼-in.	to 1-in.	...	...	each	12/9
„ 11, „ 1-in.	„ 2-in.	...	...	„	18/8
„ 12, „ 1½-in.	„ 3-in.	...	...	„	26/0



No. 840.—Tube Cutters (improved direct action), with three knives.

No. 22, to cut ¼-in.	to 1-in.	...	...	each	19/0
„ 23, „ 1-in.	„ 2-in.	...	...	„	28/0
„ 24, „ 1½-in.	„ 3-in.	...	...	„	35/0

No. 841.—Patent Tube Cutter, with Tongs and Cutter combined.

This entirely dispenses with the necessity for carrying more than two sizes to cut off or grip all size tubes for ¼-in. to 2-in. It is very strong and durable; the jaw is steel inside, and hardened; and the working parts are all enclosed, and not liable to wear away with dirt and rust. They are all well tested before sending out, and if ordinary care be used, one Cutter will cut off thousands of tubes.

No. 1. ¼-in.	to 1-in.	...	...	each	16/6
„ 2. 1¼-in.	„ 2-in.	...	...	„	26/0
„ 3. 2¼-in.	„ 3½-in.	...	...	„	36/6
Extra Cutters for No. 1		...	...	„	1/0
„ „ „ 2		...	...	„	1/6
„ „ „ 3		...	...	„	1/6

No. 842.—Turn Pins.

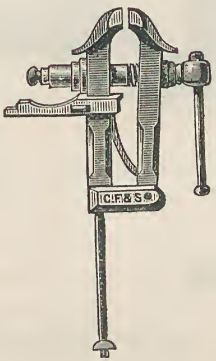
	1-in.	1½-in.	2-in.	2½-in.	3-in.	3½-in.	4-in.
Each...	4d.	5d.	6d.	9d.	1/0	1/6	2/0

No. 843.—Vices. For window lead.

To turn three leads ... ...each £6 15 0

EXTRA.

Bands ... ... each 25/0

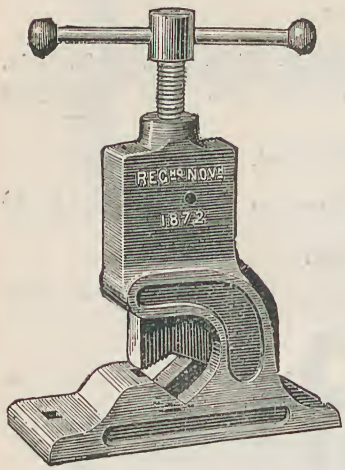


Average weights	25	30	40	60	80	105 to 120 lbs. each.
Size of jaws ...	3	3½	4	4½	5	6-inches.

Can be had heavier if required.

		Per cwt.
No. 843a.	—Best solid box black staple vices...	£3 1 0
,, 843b.	—Second quality ditto	2 12 0
,, 843c.	—Best solid-box bright staple vices	3 5 0
,, 843d.	—Second quality ditto	2 16 0
,, 843e.	—Best warranted solid boxes and pins	6 1 0
,, 843f.	—Wrought iron solid-box parallel vices.	

Jaws ...	3½	4	5	6	7	8-inches.
Each ...	37/0	45/0	66/0	86/6	111/6	134/0

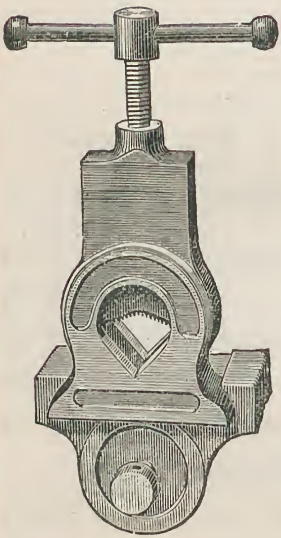


No. 845.—Pipe Vice.

For holding iron tube, &c., with registered side opening.

As will be seen by the illustration, the pipe is placed under the grip sideways, instead of being pushed through, with this further advantage, its capability to hold down circular tubes, bends, gas joints, &c. It is very strong, of simple construction, and well adapted for confined situations.

D.	to hold	¼-in. to 2-in.	each	18/6
E.	„	¼-in. „ 3-in.	„	29/6
H.	„	¼-in. „ 4-in.	„	42/0
F.	„	¼-in. „ 1¼-in.	„	12/9

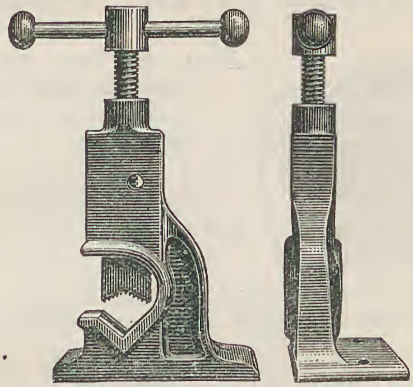


No. 846.—Pipe Vice.

With slide.

A's.	to hold	¼-in. to 2-in. ...	each	22/0
B's.	„	¼-in. „ 3-in. ...	„	38/0
C's.	„	¼-in. „ 1¼-in.	„	17/0

By the application of the slide, a tube can be held in any position, crossways, horizontal, or perpendicular.



No. 847.—Malleable Iron Pipe Vices.

In introducing these Malleable Iron Pipe Vices, we believe we are meeting a want that has been long felt in the trade, viz., a Pipe Vice as strong as those we already make, but of less weight, that can be easily carried in a fitter's basket. This we attain as shown below, by making them of best malleable iron instead of ordinary cast iron, and fitting them with steel sliding wedges and steel pointed screws, which considerably reduces the weight, while retaining the strength. We give the weight of each, so that the difference can be easily seen.

No. M1. $\frac{1}{8}$-in. to 1-in. sockets ... ... each 10/0 weight, 4-lbs.

„ M2. $\frac{1}{8}$-in. „ $1\frac{1}{4}$-in. „ ... ... „ 14/6 „ $9\frac{3}{4}$-lbs.

weight of ordinary Vice, 24-lbs.

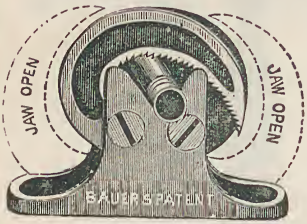
„ M3. $\frac{1}{8}$-in. „ $1\frac{1}{2}$-in. sockets ... „ 19/0 „ 13-lbs.

„ M4. $\frac{1}{8}$-in. „ 2-in. „ ... .. „ 22/0 „ 17-lbs.

weight of ordinary Vice, 42-lbs.

They are all made to take the sockets of the sizes given, so that joints of the sizes can be fitted.

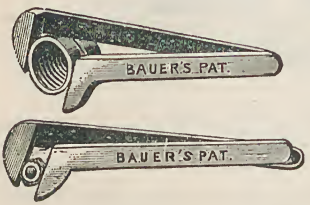
BAUER'S PATENT TOOLS.



No. 847a.—BAUER'S Patent Instantaneous Self-adjusting and Self-gripping Tube and Bolt Vice.

	Each.
No. 1 holds $\frac{1}{4}$-in. to $1\frac{1}{4}$-in. Tubes, &c., weighs 3-lbs.	7/6
No. 2 holds $\frac{1}{4}$-in. to $2\frac{1}{2}$-in. Tubes, &c., weighs 10-lbs.	15/0

This grips automatically and works in any position. It weighs only about one-fifth of the old-fashioned cast-iron tube vice.



No. 847b.—BAUER'S Patent Self-adjusting Self-gripping and Self-acting Link Spanner and Pipe Wrench, for bolts, nuts, tubes, gas pipes, &c.

5-in.	8-in.	12-in.	15-in.	18-in.	24-in.
1/8	2/8	4/0	5/0	6/0	8/0

It is made entirely of steel, and grips from the smallest to the largest size instantly.

No. 847c.

No. 847d.

No. 847c.—BAUER'S Patent Combination Stock and Dies.

$\frac{3}{8}$-in and $\frac{1}{2}$-in. brass, and $\frac{1}{8}$-in., $\frac{1}{4}$-in., $\frac{3}{8}$-in. and $\frac{1}{2}$-in., iron gas ... ...each 15/0

No. 847d.—BAUER'S Patent Tube Cutter.

For $\frac{1}{8}$-in. to 1-in. iron gas tube ... ...each 12/0

No. 848.—Baker's Preparation for Tinning and Soldering.

½-pint 0/6. 1 pint 1/0. 1 quart 2/0. 1 gallon 5/0.

Bottles included.

No. 849.—Gas Taps, Taper or Plug.

	¼-in.	⅜-in.	½-in.	⅝-in.	¾-in.	⅞-in.	1-in.
For Brass ... each	0/9	0/10	1/0	1/1	1/5	2/1	2/10
	⅛-in.	¼-in.	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.
„ Iron ... „	1/6	2/0	2/6	3/0	3/6	4/0	5/6

1¼-in.	1½-in.	1¾-in.	2-in.	2¼-in.	2½-in.	2¾-in.	3-in.
7/6	9/6	14/0	18/0	25/9	33/6	41/6	47/6

No. 850.—Gas Hooks. Per gross.

	¼-in.	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1¼-in.	1½-in.	2-in.
For Iron	1/3	1/6	1/9	—	3/0	4/0	5/6	6/6	9/0
„ Compo.	1/0	1/0	1/0	1/6	2/0	—	—	—	—

GLASS PAPER. GLASS CLOTH. EMERY CLOTH.

GOLD LEAF, English and Foreign.

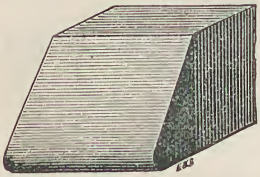
GOLD LEAF, Transferred, English and Foreign.

SILVER LEAF.

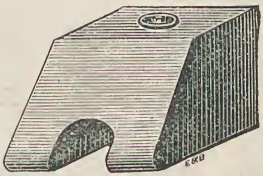
GOLD, SILVER, and COPPER BRONZE.

DUTCH METAL.

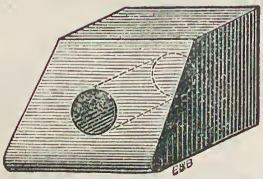
WELDED BOILERS.



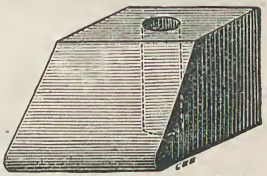
No. 851.—Bath Boiler.



No. 852.—With Arch Flue.



No. 853.—With 5-in. or 6-in. Welded Flue.



No. 854.—With 3-in. Caulked Flue.

GEORGE FARMILOE & SONS' Welded Bath Boilers.

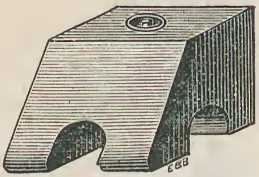
	High.	Bot.	Top.	10-in.	12-in.	14-in.	16-in.	18-in.	20-in. wide.	
No. 851	12	11	7	20/0	21/0	21/6	22/0	23/6	25/0	each.
,, 852	9	8	6	18/0	19/0	19/6	20/6	21/6	23/0	,,
,, 853	10	10	7	19/0	20/0	20/6	21/6	22/6	24/0	,,
,, 854	12	11	8	20/0	21/0	21/6	22/0	23/6	25/0	,,
	12	12	9	31/0	32/6	34/0	35/0	36/6	38/0	,,

Brass Unions, with copper extension pipes fitted to boilers.

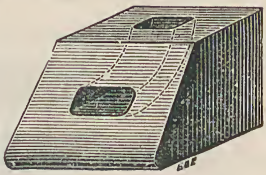
To solder to lead pipe ... ... $\frac{3}{4}$-in., 6/9 1-in., 8/3 per pair.

To screw to iron pipe ... ... 1 ,, 9/9 $1\frac{1}{4}$,, 12/9 ,,

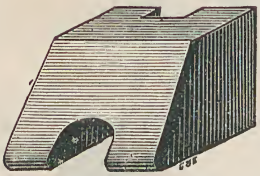
WELDED BOILERS.



No. 855.—With Front and Side Flue, right or left hand.



No. 856.—With Oval Curved Flue.



No. 857 —With Intersecting Flue.

No. 858.—Flat, with Arch Flue and Manhole and Cover.

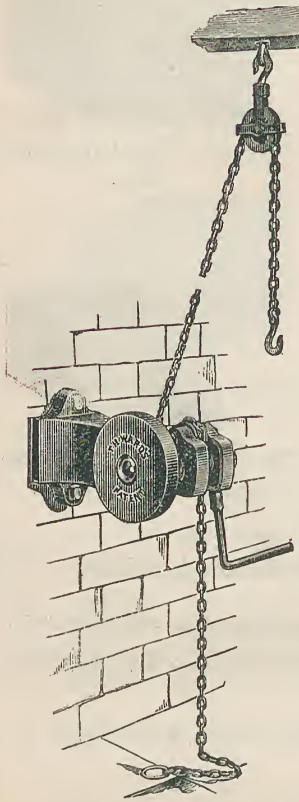
GEORGE FARMILOE & SONS' Welded Bath Boilers.

	High.	Bot.	Top.	10-in.	12-in.	14-in.	16 in.	18-in.	20-in. wide.	
No. 855	12	12	9	32/6	34/0	35/0	36/6	38/0	40/0	each
,, 856	12	12	9	29/0	30/6	32/6	34/0	35/0	36/6	,,
,, 857	12	12	9	35/0	36/6	38/0	40/0	41/6	43/0	,,
,, 858	12	12	9	35/0	36/6	38/0	40/0	41/6	43/0	,,

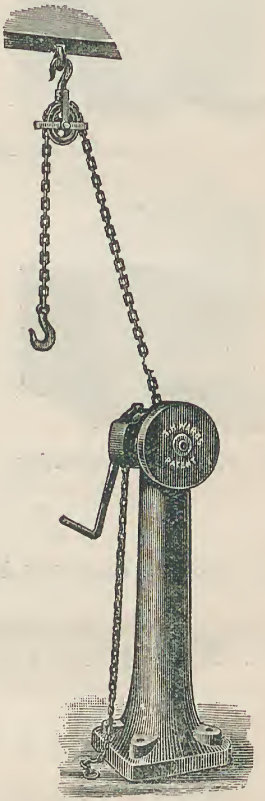
EXTRA.

Wrought Iron Manhole Covers, according to size, from 3/6 upwards.

WARD'S PATENT HOISTS.



WALL CRAB HOIST.
No. 859.



PILLAR CRAB HOIST.
No. 860.

WARD'S Patent Hoist.

For prices and particulars see next page.

WARD'S PATENT HOISTS.

These hoists are suitable for warehouses, goods sheds, cellars, coach houses, houses, factories, dock yards, hotels, corn mills, builders, breweries, grocers, &c.

In ordering, state height of lift required. If not stated, all hoists are sent with chain suitable for 10-feet lift.

The length of chain required is twice the height of lift.

SIZES AND PRICES.

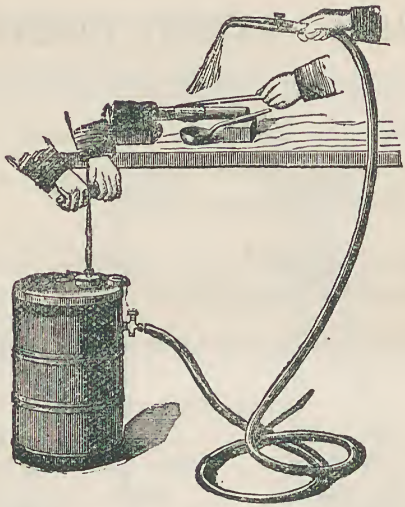
Tested to	No. 859. Wall Crab. Each.	No 860. Pillar Crab Each.	Bright Chain, Per foot.	Top Pulley, Each.
2½ cwt. ...	£2 0 0	£2 5 0	5d.	3/6
5 ,, ...	3 0 0	3 7 6	7d.	5/0
10 ,, ...	4 10 0	5 0 0	9d.	9/0
20 ,, ...	6 10 0	7 0 0	11d.	11/0

These hoists are extremely simple, compact and handy, and are suitable for any height of lift, as the chain merely passes through them instead of accumulating on a barrel.

They have a self-acting brake which releases as the load is being raised, sustains it afterwards, and only permits of lowering by winding backwards.

When desired the empty chain may be lowered quickly by disengaging the pawl.

A very slight effort is required in lowering, accelerated speed is impossible, the load is under perfect control and the handle can never "fly round," though suddenly loosened when the load is in suspension.



No. 861.—Briggs' Patent Soldering Apparatus.

The Inventor begs to call special attention to the fact that in executing ordinary plumber work there is always a certain degree of danger attending the same, so far as fire is concerned, and also a great deal of time unavoidably lost besides.

For Example:—When bending large lead pipes the practice is to use burning shavings or molten lead, in order to raise the required heat on the part to be bent: it is of course obvious that the application of shavings for such purposes is a very dangerous proceeding, however careful a man may be, while the loss of time is entailed by the searching for and lighting each small "ball," to be dropped periodically into the bend. If, on the other hand, shavings are *not* used, a fire must be had to melt the lead: the time lost in getting, or making one, being at least equal to that of preparing the metal for soldering any kind of a joint.

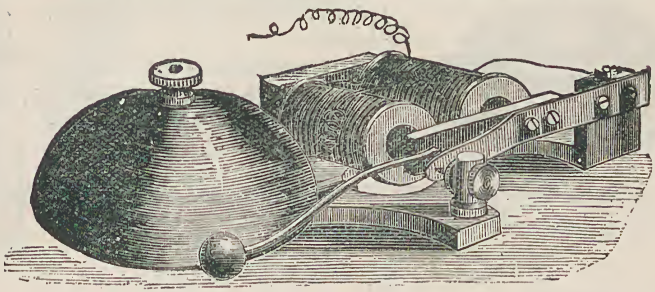
By using this apparatus, both the danger from fire and the loss of time are prevented, because, when the cylinder is charged with the required quantity of "benzoline," it is at once ready with a supply of gas (assisted by compressed air), sufficient to produce such a fierce flame as to enable any person to melt, in a few seconds, a bar of solder or lead, while it is so much under the control of the operator that it may be extinguished instantly, and at the same time is ready for use the next moment, or a month after.

It is so clean and complete in itself that it could be used with perfect safety in a carpeted room, providing it were necessary to do so.

This apparatus may be used for lead burning, as also for burning off paint. The cost of charging is so trifling that 200 plumbers' joints have been made for a less sum than one shilling.

No. 1 Size, for ordinary work, with 10-ft. of flexible tube and two burners, complete	each	£5	5	0
No. 2 Size, do. do. with one burner	„	3	3	0

ELECTRIC BELLS AND FITTINGS.



No. 862.—Electric Bells, best quality, mounted on metallic frames, with strong platinum tipped contact screws, silvered gongs, polished teak cases.

No. 1. 2¼-in. ... each	4/10	No. 4. 3½-in. ... each	8/10
„ 2. 2½-in. ... „	5/4	„ 5. 4-in. ... „	9/10
„ 3. 3-in. ... „	6/0	„ 6. 5-in. ... „	15/0

No. 6 for thief and fire alarms and signals, 6-in. gong, each 20/0

Any of the above can be had single stroke at same prices.

Electric Bells with continuous action, *i.e.*, when started they continue to ring until stopped, 17/0 each.

No. 863.—Second quality electric bells, on metallic frames, silvered gongs, mahogany cases.

2½-in. ... ... each 4/0 | 3-in. ... ... each 5/3

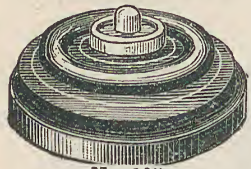
No. 864.—Third quality, single bobbin, silvered gong, mahogany cases.

2¼-in. ... ... each 3/7

No. 865.—Metallic Base Bells, in sets of 3, 4, 5, or 6, of distinct tones enabling the servants when in any part of the house, to distinguish from which room the call proceeds.

In stained and varnished wood base and cover, per bell 5/0
Do. do. polished mahogany base and cover „ 6/0

No. 865.—Circular Hardwood Pushes in box or ebonite.



No. 865.

1½-in.	per doz.	4/6
2½-in.	,,	6/6
3-in.	,,	8/6

Best quality ditto, in cocus, rosewood, oak, mahogany, &c., with platinum points.

2½-in.	per doz.	11/6
3-in.	,,	14/0
China Pushes, plain, white, or black	,,	10/0
,, ,, cream colour reeded	,,	12/0
,, ,, white or black with gold lines	,,	14/0
,, ,, ,, ,, ,, design	,,	21/0
,, ,, hand painted Dresden China	,,	18/0

No. 866.

No. 866.—Circular Brass Outdoor Pushes, marked "Press."

Each 1/0 1/3 1/9
Brass circular reeded pushes, each 1/0 & 2/0
Best quality circular press barrel pushes, with false headed screws for fixing
3¼-in. dia. 4/11
4¼-in. dia.... ... ... 5/6

No. 867.

No. 867.—Brass Outdoor Pushes, oblong, for fixing, with false-headed screws.

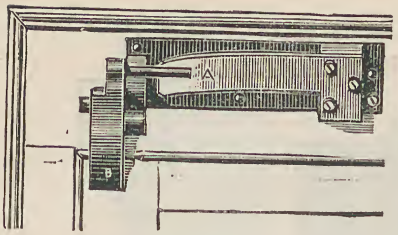
Small	..each	6/0
Large	,,	7/6
Brass oblong pushes on mahogany blocks	,,	1/9

No. 868.—Bronzed Outdoor Pulls.

Each ... ... 5/0 6/0 7/0 & 8/0

No. 869.—Pear Shape Pushes in all woods.

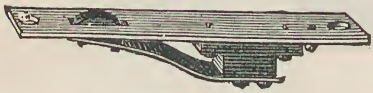
Second quality	per doz.	15/0
Best quality	,,	22/0
With 2 contacts	...each	6/0
New form invalid push	,,	2/6
Rosettes for wall, for use with pear pushes	per doz.	16/0



No. 870.

No. 870.—Shop Door Trigger, improved form.

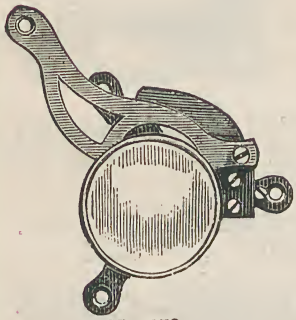
Each 2/8
Floor contacts ... each 5/6



No. 871.

No. 871.—Thief Alarm for doors or windows, with brass base and ebony fittings.

Each 1/9
Do. on hardwood base, each 1/2

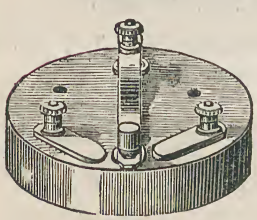


No. 872.

No. 872.—Bedroom pull crank lever, for use with silk cord or worsted tassel.

Each 2/0
Bedroom pull in wood, box enamelled white, for use as above ... each 2/3

Silk cord, 6d. per yard. Worsted cord and tassel, 1/6 each.



No. 873.

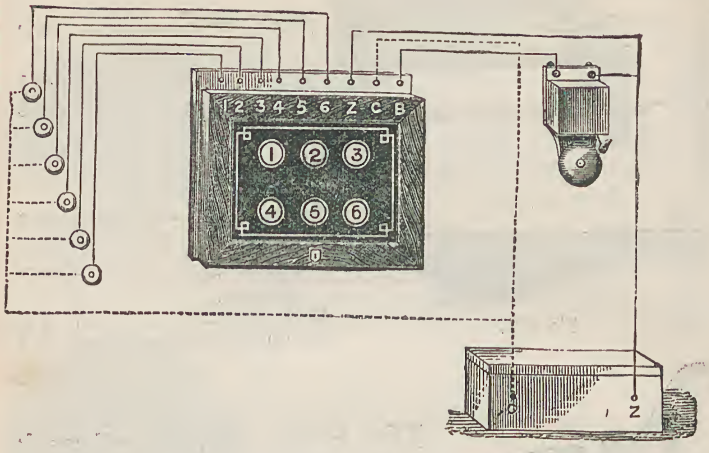
No. 873.—Switches, on circular polished hardwood bases.

One way ... ... each 1/9
Two way ... ... ,, 2/1
Three way ... ... ,, 3/0
Switches on square ebonite bases, new form. One way ... ... each 1/7
Two way ... ... ,, 2/0
Three way ... ... ,, 3/0

No. 874.—Electric Thermometer for conservatories.

No. 874.

Each 7/2
Do. with double tube for heat or cold ... ... each 13/0
Metallic fire alarms from 4/6 to 7/6 each.



No 875.—Indicators with Electrical Replacement, the most reliable and most durable, strongly recommended.

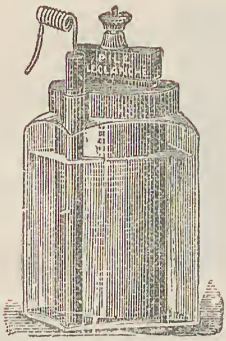
3 Numbers, 21/0 4 Numbers, 24/0 5 Numbers, 27/0 each.
6 „ 32/0 8 „ 40/0 10 „ 50/0 „

No. 876.—Indicators with Clutch Movement and Mechanical Replacement, at same prices as above.

No. 877.—Pendulum Indicators, self-adjusting, 1/0 per number extra to above prices.

Indicators with electrical replacements are also mounted with 1, 2 or 3 bells, which are of distinct tone, to ring from front or back entrance, avoiding the necessity of looking at indicator and of replacing the indicator movement, and as these two calls are usually the most frequent, a great saving of servants' time is effected. Each bell is charged as one extra number; thus, a 6-number indicator with three bells would be charged as nine numbers.

All the above indicators are fitted in polished teak or mahogany cases, with glass dials and gilt lettering, and fitter's name, &c., can be added without extra charge.



No. 878

No. 879

No. 878.—Leclanche Battery, complete with Sal-Ammoniac.

No. 1, 5-in. by 2-in.	Inner cells	each	1/8
,, 2, 6-in. ,, 2½-in.	,, ...	,,	1/10
,, 3, 6½-in. ,, 3-in.	,, ...	,,	2/10

No. 879.—Leclanche Battery, new Patent Agglomerate Plates, complete as above.

No. 1, 5½-in. by 1¼-in.	Carbon.	each	3/0
,, 2, 6-in. ,, 1½-in.	,, ...	,,	4/0
,, 3, 7-in. ,, 1¾-in.	,, ...	,,	5/0

No. 880.—Wire.

India rubber and double cotton covered wire of the highest conductivity copper, strongly recommended for electric bell work, in various colours, paraffined over the cotton.

No. 22 per doz. yds. 6d.; per 220 yds. 7/6; per mile	£2	15	6
No. 20 per doz. yds. 8d.; per 220 yds. 10/; per mile	3	15	0

Double cotton and paraffined (a trustworthy but cheaper insulation) for electric bell work, fancy cotton covering—

No 22, per doz yds. 4d.; per 220 yds. 5/6; per mile	£2	0	0
No. 20, per doz. yds 6d.; per 220 yds. 7/6 ,,	2	12	0
Silk Cord, double for pear pushes, &c., various colours, per yd.			0/3
Do. do. double, 3-strand, very superior appearance ,,			0/5

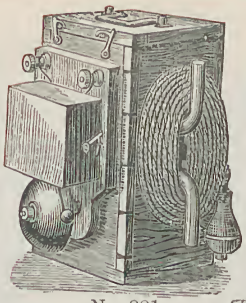
Wire for underground or external use.

Taped and tarred G.P. Wire for underground or out-door work, No. 20 per yd., 2d. 100 yards, 11/6 per mile £9 5 0

Do. do. for underground or out-door work, No. 18 per yard, 2½d., 100 yards, 15/6, per mile 12 10 0

Steel Wire Staples, 4d. gross. Zinc Bell Tube, per cwt.

Guttapercha Tissue for making joints, &c., &c.



No. 881

No. 881.—Portable Electric Bell, in polished mahogany case, with 50 ft. of silk covered stranded wire and ebony push, complete, largest size.

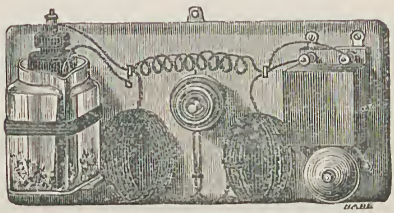
Each £1 14 0

No. 882.—Ditto, ditto, in varnished pine case, 50 ft. silk covered wire, and second size bell and battery.

Each £1 1 0

No. 883.—Ditto, ditto, in plain deal case, and with 40 ft. wire, with plain push.

Each 16/0



No. 884

No. 884.—Sets of Electric Bell Apparatus, to enable fitters to show the electric bell system in the simplest manner, mounted on board with bell, battery, wire and push.

Per set 10/0

No. 885.—Ditto, with third quality bell ... ... per set 8/8

,, **886.**—Set of Electric Bell Apparatus for shop door, consisting of 2½-in. bell, No. 2 battery, 50 yards wire, and shop door trigger.

Per set 14/0

No. 887.—Set of Electric Bell Apparatus, consisting of 2½-in. second quality bell, battery, 24 yards double wire and 2½-in. push.

Per set 8/0

No. 888.—Ditto, ditto, with third quality bell 7/0

LIGHTNING CONDUCTORS.

These Conductors have a guaranteed conductivity of 97 °/₀ pure copper, and are made in continuous lengths.

No. 889.—Copper Rope Conductors, with plain point, and all fastenings, complete—

Per foot, $\frac{3}{8}$-in. dia. 1/0 $\frac{1}{2}$-in. dia. 1/6 $\frac{5}{8}$-in dia. 2/0

No. 890.—Solid Copper Ribbon Conductor, in continuous lengths, ready for fixing—

Per foot, $\frac{5}{8}$ by $\frac{1}{12}$-in. 1/0 $\frac{3}{4}$ by $\frac{1}{8}$-in. 1/6 1 by $\frac{1}{8}$-in. 2/9
Earth plate of stout sheet copper ... ... per lb. 1/0

Experienced men sent to any part of the kingdom to fit electric bells, pneumatic bells, speaking tubes, lightning conductors.

Estimates free.

VIBRATION TELEPHONE

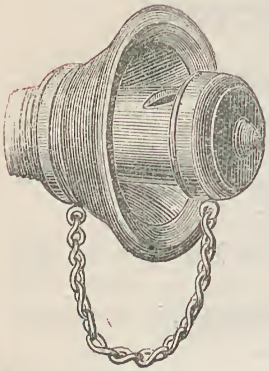
Consisting of a sound box at each end of a properly insulated and stretched wire; works well for distances of 30 to 1000 ft.

No. 891.—Vibration Telephone, with 6 insulators and 100 ft. of wire, with all instructions.
Each £3 0 0

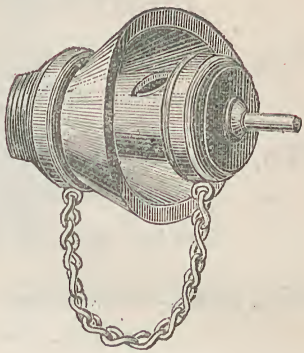
No. 892.—Vibration Telephone as above, with electric bell, push, and battery for each end.
Each £5 0 0

Instructions for fixing electric bells and indicators, also for recharging and renewing batteries, &c., &c., on application.

SPEAKING TUBES & FITTINGS.



No. 893



No. 894

MOUTHPIECES AND WHISTLES FOR SPEAKING TUBES.

No. 893.—Round, cocus or ebonized, screwed to iron pipe gauge.

Per doz. ... ... ½-in. 8/0 ¾-in. 9/0 1-in. 13/6

No. 894.—Oval, cocus or ebonized, screwed to iron pipe gauge.

Per doz. ... ... ½-in. 10/6 ¾-in. 11/6 1-in. 15/6

No. 895.—Round Mouthpieces as above, fitted for ⅝-in. flexible tube.

Per doz. 9/0

No. 896.—Oval ditto ditto.

Per doz. 11/6

EXTRAS.

Any of above in solid ebony ... ... per doz. 1/0
Indicators fitted to any of above ... ... ,, 2/6
Round cocus mouthpiece, with whistles fixed inside which cannot be lost, 1/6 per doz. on above prices.

No. 897.—Ivory Mouthpieces and Whistles.

	Per doz.		Per doz.
½-in. for iron male, round ...	81/0	½-in. for iron male, oval ...	90/0
½-in. ,, female ,, ...	99/0	½-in. ,, female ,, ...	117/0
¾-in. ,, male ,, ...	90/0	¾-in. ,, male ,, ...	108/0

EXTRAS.

Indicators to any of above ... ... per doz. 4/6
If for flexible tube at same price as for iron female.

No. 898.—Gutta Percha Mouthpieces and Whistles.

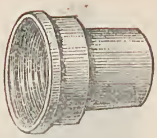
Per doz. ... ... ½-in. 8/0 ¾-in. 10/0 1-in. 14/6

No. 899.—Round Brass Mouthpieces and Whistles.

Each ... ... ½-in. 3/10 ¾-in. 4/9 1-in. 5/9

No. 900

No. 901



No. 902

No. 900.—Brass Elbow, one end prepared to receive mouthpiece, other end for zinc or compo tube, with countersunk screw holes for fixing to walls, &c.

Per doz. ... ... ½-in. 7/0 ¾-in. 10/0

No. 901.—Wood Connector, to attach flexible tube to iron pipe, or to screw into socket with zinc or compo pipe.

Cocus or ebony, for ¾-in. flexible tube and iron pipe ... ... per doz. 5/0

Ivory ditto 18/0

No. 902.—Brass Ferrules, one end female for iron, other for zinc or compo.

Per doz. ... ... ½-in. 4/0 ¾-in. 5/0 1-in. 6/0

No. 903.—Brass Fork Hooks and Roses, for holding flexible tube, burnished and lacquered.

Per doz. 7/6

No. 904.—Brass Nipple Pieces, one end to screw into mouthpiece, other end tinned for zinc or compo pipe.

Per doz. ... ... ½-in. 3/0 ¾-in. 4/0 1-in. 5/0

No. 905.—Cast Brass Cover Roses or Back Plates, lacquered, 3-in. diameter to fit over ½-in. or ¾-in. nipples.

Per doz. 4/6

No. 906.—Mahogany or Ebonized Cover Roses.

Per doz. 9/0

Boxes for elbows ... ... per doz. 12/0

No. 907.—Braided Rubber Speaking Tube, mounted on spiral wire, very strong and flexible.

¾-in. worsted covered ... ... per foot 1/0

¾-in. silk and mohair covered ... . ,, 1/4

Copper, Brass, Iron, Zinc and Compo Speaking Tubes.

No. 809.—The "Lewis" Hand Fire Extinguisher instantly puts out fire, being the most effective appliance yet introduced to the public. It is fast superseding all the glass (or partly glass) "Grenades." The liquid contained in the "Lewis" Hand Fire Extinguisher is far more powerful in its fire-extinguishing capability than anything yet sold.

The following are a few of its distinguished points of merit:—

1. Simplicity.
2. Convenience in handing and locating.
3. Always ready for use.
4. Harmless to either person or clothing.
5. Will not explode.
6. Will not freeze.
7. Will keep in any climate.
8. Its virtue or efficiency is not impaired by age.

The Lewis Hand Fire Extinguisher is a handsomely ornamented tin tube, not unsightly in the most superbly furnished room. It is 18 inches long by 2 inches in diameter, with a sprinkler $1\frac{1}{2}$ inches below the opening end, through which the fire extinguishing fluid may be thrown or showered upon the fire.

The extinguishers are packed in cases containing one dozen each.

Per doz. £3

DEPARTMENTS NOT REPRESENTED IN THIS CATALOGUE.

LICENSED VICTUALLERS' FITTINGS.

BEER ENGINES. PEWTERING.

CHINA AND GLASS SPIRIT BARRELS.

EARTHENWARE SPIRIT BARRELS.

MULLERS.

TEA AND COFFEE WARMERS.

BAR STOVES. OUTSIDE LAMPS.

POTS, MEASURES, FUNNELS, &c.

ILLUSTRATED PRICE LIST ON APPLICATION.

DEPARTMENTS NOT REPRESENTED IN THIS CATALOGUE.

GLASS.

PLATE, POLISHED, ROUGH & PATENT.

ROLLED PLATE.

TILES AND SLATES for Roofing.

SHEET, BRITISH AND FOREIGN.

(For Glazing, Horticultural, and Picture Purposes.)

SILVERING, EMBOSSING & BENDING.

STAINED AND LEADED GLASS.

GAS FITTINGS.

PRICE LIST ON APPLICATION.

COLOURS GROUND IN OIL.

DRYERS.

		Medium.	Best.	Super.
Patent...	per cwt.	20/0	28/0	36/0
Sugar of Lead	,,	—	42/0	56/0

OCHRES.

Stone	per cwt.	28/0	36/0	42/0
Oxford	,,	36/0	42/0	56/0
Native...	,,	42/0	56/0	60/0
Italian	,,	—	56/0	65/0

UMBERS.

Raw Turkey	per cwt.	36/0	42/0	56/0
Burnt ,, ...	,,	48/0	56/0	65/0
Raw English	,,	24/0	28/0	36/0

GREENS.

Brunswick, pale, mid. deep	per cwt.	28/0	36/0	42/0 & 56/0
Emerald Tinted, pale, mid. deep ...	,,	48/0	56/0	65/0
Bronze, pale, mid. deep	,,	42/0	56/0	65/0
Navy	per lb.	—	1/6	2/0

REDS.

Venetian	per cwt.	20/0	28/0	36/0
Indian	,,	56/0	65/0	84/0
Turkey	,,	56/0	65/0	84/0
Oxide of Iron, red	,,	18/0	24/0	28/0
,, ,, purple	,,	18/0	24/0	28/0

BLACKS.

Vegetable Black	per cwt.	56/0	65/0	75/0
Black Paint	,,	20/0	28/0	36/0
Drop Ivory Black	per lb.	9d.	1/0	1/3
,, ,, ,, (in Turps)... ...	,,	1/0	1/3	1/6

BROWNS.

Purple Brown	per cwt.	36/0	42/0	56/0
Vandyke	,,	65/0	84/0	112/0
Sienna, raw	,,	56/0	65/0	84/0
,, burnt	,,	65/0	84/0	112/0

COLOURS GROUND IN OIL—*Continued.*

BLUES.

		Medium.	Best.	Super.
Celestial Blue, deep	per cwt.	36/0	42/0	56/0
,, ,, pale	,,	28/0	36/0	42/0
Prussian	per lb.	3/0	3/6	4/0
Chinese	,,	3/0	3/6	4/0

READY MIXED PAINTS.

Stone Colour	per cwt.	28/0	32/0	36/0
Lead ,,	,,	28/0	32/0	36/0
Various (in 1 lb. tins)	,,	36/0	42/0	—

COLOURS GROUND IN WATER.

		Best.	Super.
Raw Sienna	per lb.	9d.	1/0
Burnt ,,	,,	1/0	1/3
Vandyke Brown	,,	9d.	1/0

FINEST OIL COLOURS IN LARGE COLLAPSIBLE TUBES.

	Each.		Each.
Antwerp Blue	2/0	Madder Lake	12/0
Blue Black	1/6	Oxford Ochre	1/6
Brown Ochre	1/6	Permanent White	1/6
Burnt Sienna	1/6	Prussian Blue	2/0
Burnt Umber	1/6	,, Brown	2/0
Cobalt Blue	6/0	Purple Lake	7/6
Chrome Green, light	2/0	Raw Sienna	1/6
,, ,, middle	2/0	,, Umber	1/6
,, ,, deep	2/0	Scarlet Lake	7/6
,, Yellow, pale	1/6	Sugar of Lead	1/6
,, ,, deep	1/6	Transparent Gold Ochre	1/6
,, Orange	1/6	Ultramarine, light	2/0
Cremnitz White	1/6	,, deep	2/0
Crimson Lake	7/6	Vandyke Brown	1/6
Chinese Blue	2/0	Venetian Red	1/6
Emerald Green	2/0	Verdigris	2/0
Flake White	1/6	Vermilion, light	7/6
Indian Red	1/6	,, deep	7/6
Ivory Black	1/6	Yellow Lake	7/6
Italian Ochre	1/6	,, Ochre	1/6
Lamp Black	1/6	Zinc White	1/6
Light Red	1/6		

DRY COLOURS.

OCHRES.

		Medium.	Best.	Super.
Native Oxford	per cwt.	32/0	36/0	42/0
French, washed	,,	12/0	16/0	20/0
Spruce	,,	8/0	10/0	12/0

UMBERS.

Turkey, raw	per cwt.	16/0	20/0	24/0
,, burnt	,,	28/0	36/0	42/0
English	,,	8/0	10/0	12/0

GREENS.

Brunswick, pale, mid. deep	per cwt.	28/0	36/0	42/0 & 56/0
Emerald Tinted, pale, mid. deep	,,	42/0	56/0	65/0
Quaker or Bronze, pale, mid. deep	,,	42/0	56/0	65/0
Emerald	per lb.	1/0	1/3	1/6

REDS.

Venetian	per cwt.	10/0	14/0	18/0
Oxide of Iron, red	,,	12/0	16/0	20/0
,, purple	,,	12/0	16/0	20/0
Indian	,,	56/0	65/0	84/0
Chinese	per lb.	9d.	1/0	1/6
Vermilionette	,,	1/0	1/3	1/6
Vermilion	,,	3/0	3/6	4/0

BLACKS.

Lamp Black, loose	per cwt.	18/0	24/0	28/0
,, in packets	,,	28/0	32/0	36/0
Vegetable	per firkin	3/0	3/6	4/0
,,	per ½ bar	4/0	4/6	5/0
,,	per bar	7/0	8/0	9/0
Mineral	per cwt.	8/0	10/0	12/0
Drop	,,	56/0	65/0	84/0

BLUES.

Ultramarine	per lb.	9d.	1/0	1/6 & 2/0
Lime	per cwt.	28/0	36/0	42/0
Celestial	,,	28/0	36/0	42/0
Prussian	per lb.	2/6	3/0	4/0

DRY COLOURS—*Continued.*

BROWNS.

		Medium.	Best.	Super.
Purple Brown	per cwt.	28/0	36/0	42/0 & 56/0
Spanish	,,	10/0	14/0	18/0
Vandyke	,,	56/0	65/0	84/0
Sienna, raw	,,	42/0	56/0	65/0
,, burnt	,,	56/0	65/0	84/0

YELLOWS.

Chromes, lemon, yellow, orange, red	per lb.	9d.	1/0	1/6

PINKS.

Rose	per cwt.	42/0	56/0	65/0
Dutch	,,	36/0	42/0	56/0

ANTI-CORROSION

For Out-Door Work.

Stone colour, drab, chocolate	per cwt.	24/0

SUNDRIES.

Duresco	per cwt.	30/0
Mineral white paint	,,	32/0
,, red ,, ...	,,	28/0
Electric Paint Remover	per lb.	6d.
Harmer's ,, ,, ...	,,	6d.
Silicate Oil Paints	*According to colour.*	
Enamel ,, ...	*Prices on application.*	
Torbay ,, ...		

WHITE LEAD, &c.

Genuine Ground White Lead ... per ton

,, ,, ,, special make ,,

,, Refined Red Lead ... ,,

,, ,, Orange Lead ... ,,

,, Ground Zinc White ... ,,

SUNDRIES.

CHARCOAL. COAL TAR. CART GREASE.

FILLING UP POWDER. PITCH, British.

PITCH, Swedish. PUMICE STONE, Picked.

PUMICE STONE, Powdered.

RESIN. SOFT SOAP. SMALTS, Strewing.

STOCKHOLM TAR, in Barrels. Ditto, in Half Barrels.

CONCENTRATED SIZE.

More economical than ordinary size and more readily prepared for use.

Having **much improved the quality** of their CONCENTRATED SIZE, G. FARMILOE & SONS can with confidence recommend it:—

1st.—For its great strength.

2nd.—For its extreme paleness.

G. F. & Sons have seen the necessity of preparing this article from the BEST MATERIALS ONLY, having found that the commoner qualities in the Market give general dissatisfaction.

The superior quality of the article is guaranteed, and a trial solicited.

For the convenience of the Trade, it is supplied in 1-lb. packets, enclosed in boxes of 28-lbs., 56-lbs., and 1-cwt.

Per $8\frac{1}{2}^{D.}$ lb.

A second quality at $7^{D.}$ per lb.

SIZE.

DOUBLE AND PATENT.

GLUES.

G. FARMILOE & SONS can execute immediately from stock, orders for the following glues :—

Good bright glue	per lb.	4½d.
French medal glue (Coignet's)	,,	5½d.
Imperial ,, ...	,,	6½d.
Best Scotch ,, ...	,,	7d.
Finest Pale English glue	,,	7½d.
(Very strong, and most suitable for best cabinet work.)		
Thin gelatine glue...	per lb.	8d.

A discount allowed for quantities.

VARNISHES, &c.

Fine pale **Oak** varnish (in and out)	per gall.	8/0
Pale **Copal Oak** varnish (in and out)	,,	10/0
Superfine pale **Elastic Oak** varnish (in and out)	,,	12/0
Fine extra hard **Church Oak** varnish (inside) ...	,,	12/0
Superfine **Hard Drying Oak** varnish (for seats of churches)	,,	14/0
Fine pale elastic **Carriage** varnish	,,	14/0
Superfine pale elastic **Carriage** varnish	,,	16/0
Fine pale **Maple** varnish	,,	16/0
Finest pale durable **Copal** varnish	,,	18/0
Superfine pale **Copal Body** varnish (old)	,,	24/0
Extra pale **French Oil** varnish	,,	21/0
Fine pale **Paper** varnish	,,	10/0
Finest **Crystal Paper** varnish	,,	14/0
Copal **Yacht** varnish (two shades) ...	per gall.	14/0 & 18/0
Eggshell **Flatting** varnish	per gall.	18/0
White **Enamel** varnish	,,	20/0

			Super.
Japan gold size	per gall.	10/0	12/0
Terebene	,,	10/0	12/0
Patent knotting	,,	10/0	12/0
Brunswick black	,,	7/6	9/0
Black japan	,,	14/0	20/0
Wood stains (liquid) oak, walnut, mahogany, &c.	per gall.		8/0
,, (in oil) ,, ,, ,,	,,		14/0
,, (in powder) ,, ,, ,,	per lb.		8/0

OILS AND TURPENTINE

AT LOWEST PRICES, BASED ON MARKET QUOTATIONS.

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